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SOUTH BOSTON WATERFRONT DISTRICT

MUNICIPAL HARBOR

PLAN

A MUNICIPAL HARBOR PLAN OF THE CITY OF BOSTON



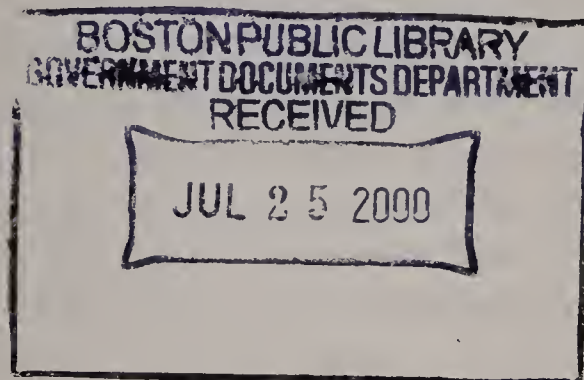
CITY OF BOSTON
Thomas M. Menino
Mayor

Boston Redevelopment Authority
Mark Maloney
Director

JULY 2000

SOUTH BOSTON WATERFRONT DISTRICT
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Clarence J. Jones
Chairman

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Co-Vice Chairman

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Co-Vice Chairman

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Secretary

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JULY 2000

MUNICIPALITY OF

San Francisco



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“But look! Here comes more crowds, pacing straight for the water, and seemingly bound for a dive. Strange! Nothing will content them but the extremest limit of the land; loitering under the shady lee of younder warehouses will not suffice. No. They must get just as nigh the water as they possibly can without falling in. And there they stand--miles of them--leagues. Inlanders all, they come from lanes, alleys, streets and avenues – north, east, south, and west. Yet here they all unite. Tell me, does the magnetic virtue of the needles of the compasses of all those ships attract them thither?”

Moby-Dick

Herman Melville, 1851

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PREFACE

This Municipal Harbor Plan for the South Boston Waterfront is submitted to the Secretary of Environmental Affairs of the Commonwealth by the Boston Redevelopment Authority in accordance with 301 CMR 23.00 *et. seq.*, Review and Approval of Municipal Harbor Plans, implementing M.G.L. Chapter 91. The Municipal Harbor Plan is a primary implementation strategy for the Public Realm Plan for the South Boston Waterfront that includes land both within and outside of Chapter 91 jurisdiction.

In 1997, Mayor Thomas M. Menino charged the Boston Redevelopment Authority with creating a vision for the public realm for the South Boston Waterfront and defining a framework for future development in the district. After two years of extensive public process and thoughtful, deliberate debate, the Public Realm Plan was issued by the Boston Redevelopment Authority. The five primary planning principles which will guide the build-out of the area are:

- Promote access to Boston Harbor as a shared natural resource and connect people, land and water.
- Preserve and enhance the industrial port and balance the growth of mixed use and recreational activity along Boston Harbor with the needs of maritime commerce.
- Plan the district as a vital mixed-use neighborhood that expands the City's residential communities and provides a lively mix of open space, civic and cultural, water-transit and commercial uses and job opportunities that are mutually supportive and bring activity to the waterfront.
- Develop the district as an integral part of Boston's economy, enhancing our City's hotel, commercial office, retail and visitor industries and our position as the economic catalyst for the region.
- Ensure that the South Boston residential community and all neighborhoods of the City are not only protected from potential impacts from development, but share in the benefits of private investment.

Received of the Treasurer of the
Board of Education the sum of
Twenty Five Dollars for
the year ending June 30, 1887.

Witness my hand and seal this
1st day of July 1887.

Superintendent of Schools

Board of Education

City of New York

Attest

Secretary

✓

These five principles provide the basis for this Municipal Harbor Plan. The Plan spans the Chapter 91 jurisdictional area along the east side of Fort Point Channel and along the Fan Pier and Pier 4, and builds upon the City's overall Harborpark planning policies that include:

- Promote access to Boston's waterfront and the public's rights in the tidelands.
- Revitalize Boston's underutilized and dilapidated piers and shoreline.
- Activate the waterfront zone.
- Promote the working port.

Today, much of the South Boston Waterfront consists of parking lots and warehouses, but the Plan capitalizes on the area's two distinct advantages - its location and the tremendous influx of public investment in the district. This part of the waterfront is strategically positioned between the downtown and the airport. Its close proximity to several residential neighborhoods, the deep-water port, and its connection to the regional highway system make it an ideal location for attracting future development. The benefits of its location are further enhanced by twenty billion dollars of public investment, including major clean-up of the Boston Harbor, depression of the Central Artery and construction of a Third Harbor Tunnel, development of the Silver Line Transitway and the construction of the new convention center. All of these investments have combined to create a unique opportunity for the development of a new urban neighborhood.

This Municipal Harbor Plan ensures that as growth proceeds along our urban waterfront in the 21st century, it will be defined by always ensuring that all of the Commonwealth's residents have access to our precious tidelands.

The Plan is the culmination of the work started in the Public Realm Plan, coupled with a one year public process to create this Municipal Harbor Plan. The Municipal Harbor Plan Advisory Committee members, area residents, advocacy groups, property owners and public agencies have had a tremendous impact on this document. The Commonwealth's Office of Coastal Zone Management and Department of Environmental Protection have provided invaluable input regarding implementation of the Chapter 91 Waterways regulations and provisions for this Plan.

The Waterways regulations establish the same use and dimensional parameters for waterfront development along the entire Massachusetts

1. The first part of the paper discusses the importance of the study and the objectives of the research. It also mentions the scope of the study and the limitations of the study.

2. The second part of the paper discusses the methodology used in the study. It includes the data collection methods and the data analysis methods.

3. The third part of the paper discusses the results of the study. It includes the findings of the study and the conclusions drawn from the study.

4. The fourth part of the paper discusses the implications of the study. It includes the practical implications of the study and the theoretical implications of the study.

5. The fifth part of the paper discusses the future research. It includes the suggestions for future research and the areas for further study.

The study was conducted in a systematic and rigorous manner. The data was collected from a large sample of participants and was analyzed using advanced statistical techniques. The results of the study are presented in a clear and concise manner, and the conclusions drawn from the study are well-supported by the data. The study has important implications for the field of research and provides valuable insights into the topic. The findings of the study are consistent with previous research and provide a new perspective on the issue. The study also identifies areas for further research and suggests ways in which the findings can be applied in practice.

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coastline. The regulations also allow a city to propose substitutions to these parameters that tailor them to the unique characteristics of an individual harbor and reflect the planning goals and objectives of the particular city. Any such substitutions must provide for compensatory or offsetting measures for any adverse impacts produced, and must promote the Commonwealth's tidelands policy objective with greater or equal effectiveness.

This Municipal Harbor Plan requests substitutions that reflect the *urban* nature of Boston Inner Harbor and a desire to create a density, scale, and activity level consistent with other areas of the City and supportive of the broadest public use of the waterfront. The substitutions also reflect the excellent urban design qualities and intimate pedestrian-oriented scale for which Boston is famous and contributes to our livable qualities. The plan requires, among numerous other components, a minimum of fifty-percent open space on all major development sites; Harborwalk along the entirety of the waterfront; major water transportation facilities; a minimum of one-third residential and maximum of one-third office uses on new development sites; civic and cultural uses; application of urban design and universal access guidelines; public and open space maintenance guidelines; subsidies for water transportation and open space acquisition and maintenance; and offsets for any impacts from development on the tidelands.

The City of Boston looks forward to implementing this Plan over the next several years to protect the public's rights in the tidelands. We will continue to make Boston Harbor's waterfront, water sheet and Harbor Islands National Park area a common ground for all to share in our rich resources.

SOUTH BOSTON WATERFRONT DISTRICT MUNICIPAL HARBOR PLAN

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SOUTH BOSTON WATERFRONT DISTRICT MUNICIPAL HARBOR PLAN

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1.0 INTRODUCTION

This Municipal Harbor Plan for the South Boston Waterfront District is submitted to the Secretary of Environmental Affairs of the Commonwealth by the Boston Redevelopment Authority in accordance with 301 CMR 23.00, et. seq., Review and Approval of Municipal Harbor Plans. The South Boston Waterfront District, shown in Figure 1-1, comprises approximately 1025 acres of land and adjacent watersheet spanning from the east side of Fort Point Channel to the Reserved Channel. This Municipal Harbor Plan covers a portion of the South Boston Waterfront District that is within the jurisdiction of Chapter 91 (MHP Area). The MHP Area, shown in Figure 1-2, is comprised entirely of Commonwealth tidelands, and includes Fort Point Channel and portions of the Fort Point Historic, Fort Point Industrial and Inner Harbor Subdistricts.

The Chapter 91 jurisdictional boundary line in the South Boston Waterfront District, as determined by the Department of Environmental Protection, is shown in Figure 1-3. The convention center Subdistrict and the Enhancement Zone are located entirely outside of Chapter 91 jurisdiction. Portions of the Fort Point Industrial, Fort Point Historic and Inner Harbor Subdistricts likewise are outside Chapter 91 jurisdiction. Those areas of the District not subject to Chapter 91 jurisdiction are discussed in this Request for Scope for contextual purposes only and are not included in the MHP Area.

The MHP Area also does not include all of the areas of the District that are subject to Chapter 91 jurisdiction. The South Boston Designated Port Area, shown in Figure 1-4, was the subject of a separate joint BRA/Massport planning process that resulted in the Port of Boston Economic Development Plan of 1996. Also, the City recently issued a new master plan for the Boston Marine Industrial Park. Neither of these areas is included in the MHP Area. A portion of Massport's Commonwealth Flats Development Area also is located within jurisdiction, but Massport is in the process of developing a Memorandum of Understanding with DEP to govern the development of nonwater-dependent use projects in this area. Because Massport is not subject to this municipal harbor planning process, a discussion of their development plans for Commonwealth Flats is included for contextual purposes only. No portion of the Commonwealth Flats Development Area is included in the MHP Area.

1.1 IMPLEMENTATION OF THE PUBLIC REALM PLAN

This Municipal Harbor Plan emerged primarily from a series of open public meetings with the Municipal Harbor Plan Advisory Committee appointed by Mayor Menino, the Fort Point Channel Working Group, representatives of the South Boston Design Advisory Committee, the South Boston and Fort Point residential communities and representatives of advocacy groups and individuals throughout the City, as well as meetings with representatives of the Commonwealth's Department of Environmental Protection and Coastal Zone Management Office. This Municipal Harbor Plan also is a direct result of the City's comprehensive master planning process for the South Boston Waterfront. In

February 1999, after more than two years of cooperative effort between the BRA and many constituencies, the City issued its Public Realm Plan for the South Boston Waterfront (Public Realm Plan). Approval of a Municipal Harbor Plan reflective of the Public Realm Plan is one of the City's primary tools for implementing the Public Realm Plan. A detailed summary of the Public Realm Plan is included in Chapter 4 of this submission.

This Municipal Harbor Plan incorporates the planning principles and the physical planning concepts of the Public Realm Plan. Chapter 2 of this Municipal Harbor Plan is a discussion of the public processes that resulted in the development of the Public Realm Plan and this Municipal Harbor Plan. Chapter 3 is a brief history of Boston Harbor and the South Boston Waterfront. A summary of the Public Realm Plan is contained in Chapter 4. Chapter 5 provides a detailed discussion of land and water transportation issues facing the South Boston Waterfront. Because so much of Boston's waterfront is now or was recently the subject of a major planning initiative, Chapter 6 is a comprehensive discussion of the planning context for the South Boston Waterfront. Chapter 7 establishes baseline requirements and guidelines for nonwater-dependent use projects in the MHP Area. Chapter 8 is a discussion of the substitute provisions of the Waterways Regulations and an introduction to the type of substitutions that are sought through this Municipal Harbor Plan. Chapters 9-12 analyze the particular substitutions and offsets that are proposed for each of the subdistricts included in this MHP Area. Chapter 13 establishes a ten-year effective period for the Municipal Harbor Plan instead of the five-year period provided for under the MHP Regulations. Chapter 14 discusses the tools that the BRA will use to implement this Municipal Harbor Plan. Finally, Chapter 15 is a detailed analysis of how this Municipal Harbor Plan meets Coastal Zone Management guidelines and policies.

1.2 MASSACHUSETTS GENERAL LAWS CHAPTER 91, THE WATERWAYS REGULATIONS AND THE MUNICIPAL HARBOR PLAN REGULATIONS

Through the vehicle of Chapter 91 of the Massachusetts General Laws (Chapter 91), the Commonwealth vested the Department of Environmental Protection (DEP) with the general care and supervision of its Harbors, tide waters and tidelands. The Commonwealth also charged the DEP to preserve and protect the rights of the inhabitants of Massachusetts in the tidelands by ensuring that uses of the tidelands are limited to water-dependent uses or uses that otherwise serve a proper public purpose. Chapter 91 conferred upon the DEP the means to fulfill this statutory mandate by granting the DEP the authority to issue licenses which prescribe terms and conditions for use and development of tideland areas (Chapter 91 Licenses).

The DEP responded to this mandate by establishing comprehensive regulations to preserve, protect and promote the public's rights and interest in the tidelands (310 CMR 9.00, the Waterways Regulations). Most particularly, the Waterways Regulations prescribe the conditions and criteria for the granting of a Chapter 91 License. By establishing use restrictions and height, setback and open space requirements, the Waterways Regulations seek to ensure that much of the Commonwealth's waterfront either



FIGURE 1-1.
South Boston Waterfront
Subdistrict Boundaries

Boston
Redevelopment
Authority





Boston
Redevelopment
Authority

Figure 1 - 2.
Municipal Harbor Plan Area



Boston
Redevelopment
Authority



Figure 1 - 3.
South Boston Waterfront
Chapter 91 Boundary



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LEGEND

- DESIGNATED PORT AREA
- SOUTH BOSTON MARITIME ECONOMY RESERVE
- HARBOR LINE

FIGURE 1 - 4.
WATERFRONT REGULATORY CONTEXT

Boston
Redevelopment
Authority

is preserved for water-dependent uses or is available for use by all of the residents of the Commonwealth.

While the Waterways Regulations are applicable to all of the Commonwealth's tideland areas that are not landlocked, the DEP recognized that each Harbor and each Harbor-front community within the Commonwealth is unique. In order to encourage municipalities to develop long-term, comprehensive plans for their Harbors which are consistent with state waterways and tidelands policies, the DEP established a voluntary procedure by which cities and towns may obtain approval of Municipal Harbor Plans from the Secretary of Environmental Affairs (301 CMR 23.00 - the MHP Regulations). These individual Municipal Harbor Plans, developed in consultation with the Massachusetts Office of Coastal Zone Management (CZM), afford each city and town the opportunity to develop a Harbor plan tailored to the characteristics of the individual Harbor and reflective of the planning goals of the individual community. Approved Municipal Harbor Plans in turn are used by DEP for guidance in making decisions regarding use and development of tideland areas that are responsive to local objectives and priorities and Harbor-specific conditions.

The MHP Regulations also allow municipalities certain latitude with respect to the use, height, set back and open space limitations of the Waterways Regulations, provided the substitute requirements proposed by the municipality are consistent with the mandate of Chapter 91 to protect and preserve the rights of the Commonwealth's inhabitants in the tidelands and otherwise are consistent with the Waterways Regulations. In the context of obtaining approval for a Municipal Harbor Plan, a city or town may propose substitutions for specific use limitations or numerical standards delineated in the Waterways Regulations. The Municipal Harbor Plan must demonstrate that, in the context of its overall planning goals and the distinctive features of the Harbor in question, the municipality's substitutions will promote the state tidelands policy objectives with comparable or greater effectiveness than the corresponding provisions of the Waterways Regulations. If approved by the Secretary, the substitutions will be applied by DEP in lieu of the corresponding provisions of the Waterways Regulations in its evaluation of Chapter 91 License applications for the affected area.

The standards for the Secretary's review and approval of Municipal Harbor Plans also are set forth in the MHP Regulations. In approving a Municipal Harbor Plan, the Secretary must make a written determination that it is consistent with the Harbor Planning Guidelines developed by the CZM, other applicable CZM policies, and tidelands policy objectives and regulatory principles as set forth in the Waterways Regulations. The MHP Regulations also include specific criteria for the evaluation and approval of substitution requests.

1.3 THE CITY OF BOSTON'S HARBOR PLANNING

A Municipal Harbor Plan, together with the City's zoning power and the Article 80 review process, are three powerful tools that the City has at its disposal to implement its Harbor

vision. The City, through the Boston Redevelopment Authority (the BRA) submitted a Municipal Harbor Plan for a portion of the waterfront for approval in October 1990 (the 1990 Municipal Harbor Plan). The Secretary issued her decision on May 22, 1991 (the Secretary's Decision). The MHP Regulations provide that harbor plan approvals remain effective for a period of five years from the date of approval. In accordance with the MHP Regulations, the Secretary's Decision states that it would expire on May 22, 1996 unless an extension request was filed prior to that date. Through correspondence beginning in January 1996, the City requested additional time to file its renewal application and to amend the existing plan to introduce geographic areas not included in the 1990 Municipal Harbor Plan. The Secretary acknowledged that the 1990 Municipal Harbor Plan would remain in effect until the City formally submitted it for renewal.

The renewal of the 1990 Municipal Harbor Plan (MHP Renewal) is one of a series of steps planned by the City to complete its Harbor planning process. The size and complexity of Boston Harbor make it difficult to develop a plan in a single planning process that encompasses the entire Harbor area. See Figure 1-5. Also, different areas of the Harbor have different characteristics and opportunities. The City, therefore, has divided the Harbor into eight districts: Charlestown Waterfront, Charlestown Navy Yard, North Station Waterfront, Downtown/North End Waterfront, South Boston Waterfront, Dorchester Bay/Neponset River Waterfront, East Boston Waterfront and the Boston Harbor Islands. Relevant overlapping or Harbor-wide issues are coordinated as planning for each district proceeds.

Simultaneous with the preparation of the MHP Renewal, the BRA is proceeding with other steps in a comprehensive Harbor planning process. In March 1999, the City submitted the North Station Municipal Harbor Plan Amendment to EOEA in order to add a small geographic area between North Station and the North Washington Street Bridge to the City's Municipal Harbor Plan. The Secretary approved this amendment in July 1999. The Secretary also approved an amendment to add a small geographic area that includes the historically significant Building 114 to the Charlestown Navy Yard District in October 1999. The BRA currently is in the process of developing the Fort Point Downtown Amendment to add the area south of the old Northern Avenue Bridge through the Post Office site to the City's Municipal Harbor Plan. The City recently completed a comprehensive master planning process for East Boston. To implement certain aspects of the master plan, a Municipal Harbor Plan for portions of the East Boston Waterfront will be developed.

Not all of the City's Harbor planning initiatives will include a Municipal Harbor Plan component. Because the City's industrial port remains critically important to the City's continued economic vitality, the BRA recently completed a new Master Plan for the Boston Marine Industrial Park. Also, as a member of the Boston Harbor Islands Partnership, the BRA is taking part in the development of a resource management plan for the Harbor Islands that will improve access to the islands while at the same time preserving their unique character. Finally, tying all of these planning efforts together is the City's Inner Harbor Passenger Water Transportation Plan that was issued in January, 2000. This



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FIGURE 1 - 5.
Boston Inner Harbor Area

plan focuses on maximizing landside accommodation of all levels of water transit including commuter, excursion, water taxi and the Inner Harbor Cultural Loop, as well as layover and service space.

1.4 THE SOUTH BOSTON WATERFRONT MUNICIPAL HARBOR PLAN

One of the primary goals of the City's waterfront planning is to ensure that the public obtains or maintains meaningful access to the City's Harbor areas. Similarly, the purpose of the Waterways Regulations is to protect the public's rights to use and enjoy the Commonwealth's tideland areas. The use and dimensional requirements of the Waterways Regulations establish baseline standards for nonwater-dependent projects as a means of ensuring the availability of the tidelands for public use and enjoyment. The MHP Regulations provide a municipality with flexibility to substitute use and dimensional requirements that are more reflective of the individual municipality's planning goals and Harbor area than the corresponding Waterways standard. Further, they require that any adverse effects on the public's rights caused by the substitute requirements should be offset by other requirements that will enhance the public's ability to use and enjoy the tideland areas.

The City has elected to file a municipal harbor plan in order to take advantage of the ability to develop substitute use and dimensional requirements. Strict application of the Waterways standards is not always in keeping with the City's planning goals for a site, and can result in development that is less hospitable to public use and access than a more creative combination of substitute and offset provisions. The City's approach to substitute and offset provisions is to develop a program of substitutions and offsets that, when implemented, will create a better and more inviting public environment. By maximizing the pedestrian realm through the creation of quality open spaces and activation of the watersheet, we can fulfill the mandate of Chapter 91 in a manner that also furthers the City's waterfront planning goals and does not cause adverse impacts.

To begin the municipal harbor planning process, the BRA filed a Request for Scope with EOEA in July 1999. The Request for Scope outlined the City's goals for the South Boston Waterfront, and identified many of the substitutions that the BRA intended to develop with the South Boston Waterfront Municipal Harbor Plan. In October 1999, the Secretary of Environmental Affairs issued a Scope to guide the City's planning efforts. This Municipal Harbor Plan complies with the Secretary's Scope and meets the standards for approval set forth in 301 CMR 23.05, et. seq.

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2.0 THE PUBLIC PROCESS

The public process associated with the development of the Municipal Harbor Plan for the South Boston Waterfront District will have two distinct phases. The first phase of the process, already completed, involved hundreds of community meetings, workshops and presentations and culminated in the Public Realm Plan. The second phase, still ongoing, is a planning process specific to a portion of those areas within Chapter 91 jurisdiction. In the case of the South Boston Waterfront, the purpose of the Municipal Harbor Plan will be to implement the plan already developed for the area, the Public Realm Plan.

2.1 THE PUBLIC PROCESS FOR THE PUBLIC REALM PLAN

Planning for the South Boston Waterfront District began in early 1997 when Mayor Menino charged the BRA to lead the planning initiative to develop a plan for the district. This began a two-year planning process involving planners, design professionals, environmentalists, elected officials, community residents, Port and Harbor advocates and concerned citizens. The Mayor appointed the South Boston Waterfront Committee (SBWC) to advise and assist the BRA with developing this plan, the convention center proposal and other major activities in this neighborhood.

The Master Plan Sub-Committee of the SBWC was formed to focus specifically on defining the details of the Public Realm Plan. BRA planners held bi-weekly work sessions with the Master Plan Sub-Committee to discuss land use, development and transportation issues and the impact of build-out of the district on the South Boston community. Many of the major parameters of the Public Realm Plan were developed in these sessions such as connecting the South Boston residential neighborhood to the Harbor through a newly designed D Street with a focused on community housing.

In December 1997, the BRA released an Interim Report of our initial findings. The purpose of the Interim Report was to share a dialogue with the broader Boston community about the work that was ongoing and to develop a plan to guide the South Boston Waterfront District into the next century. The report generated a great deal of discussion about the area and what it would become and served to focus residents and advocacy groups on the issues facing the District.

Throughout 1998, working sessions and broad-based community-wide meetings continued. In total, approximately 145 large and small meetings were held with the public. These meetings included the Master Plan Sub-Committee of the South Boston Waterfront Committee, the Green Blue Alliance, the Boston Society of Architects, the St. Vincent's Neighborhood Group, the South Boston Residents Group, the South Boston Leadership Group, property owners as a group and individually, the Boston Harbor Association, the Conservation Law Foundation, Save the Harbor/Save the Bay, the Greenspace Alliance, the Fort Point Artists' Community, the Seaport Alliance for a Neighborhood Design, the Boston Shipping Association, state agencies including Massport, the Massachusetts

Highway Department, the Massachusetts Bay Transportation Authority, the Department of Environmental Protection, the Coastal Zone Management Office, the Federal Aviation Administration, elected officials and other individuals and advocacy groups.

In mid-1998, the BRA also contracted with the planning and urban design firm of Cooper, Robertson & Partners, who have extensive experience in waterfront planning, to assist us and the public in developing the Public Realm Plan.

As a result of this extensive public process we developed a plan around which there is a strong consensus on its basic principles and most variables. The plan includes strong land use and urban design components as well as community benefits and protections. Based on community input, a number of modifications and enhancements were incorporated into the final report. Among other elements, in response to community concerns, the BRA reduced the base height of buildings to a maximum of 150 feet and stipulated that project components of greater height would have to be reviewed and approved through a Planned Development Area process and would have to provide for community benefits. The BRA also, together with the Boston Transportation Department and Massport, hired Louis Berger & Associates to conduct a traffic impact study to ensure that the South Boston neighborhood is protected as the South Boston Waterfront District is built out, and that the new growth in the area can be accommodated.

The Public Realm Plan greatly improved and enhanced the public realm components from the Interim Report. It defined an open space system that maximizes access to and activation of the Harbor and Fort Point Channel, and developed a street and block plan that would be the foundation for a new neighborhood that would build on Boston's character as a livable city.

In January 1999, the BRA issued the Public Realm Plan. The Plan, which will guide the build-out of this critical area over the next several decades, is a very direct result of the extensive community process that preceded it and the basis for this Municipal Harbor Plan.

2.2 THE PUBLIC PROCESS FOR THE MUNICIPAL HARBOR PLAN

In July 1999, Mayor Menino appointed a waterfront-wide committee to assist the BRA with the development of a series of Municipal Harbor Plans for the City of Boston in response to the Chapter 91 Municipal Harbor Plan requirements for a harbor planning group. The Municipal Harbor Plan Advisory Committee includes community representatives from the City's waterfront neighborhoods, elected officials and representatives from state and local regulatory agencies, advocacy groups, educational institutions and commercial interests. A copy of those appointed to the Committee is included in Section 2.3 of this Municipal Harbor Plan. The Committee was carefully chosen to bring a broad range of expertise and viewpoints to the task of developing Municipal Harbor Plans that are reflective of the City's planning goals for its waterfront areas.

The first meeting of the Committee was held on July 21, 1999. The Committee has since held almost weekly meetings. The meetings, which are open to the public, have been extremely well attended. Minutes of these meetings are included in Appendix 1.

To begin the discussion of the complex series of land use and dimensional parameters that must be addressed by the municipal harbor planning process, the first series of meetings focused on providing the Committee with a background in the geographic area, a presentation of the Public Realm Plan and a walking tour. In addition, there was a technical session on the Waterways Regulations and the MHP Regulations designed to introduce members of the Committee to the municipal Harbor planning process and the substitution parameters.

Since September the Committee has focused its attention on the many issues related to the redevelopment of the MHP Area. These sessions have included general discussions about open space and lot coverage, public and private uses, building height and setbacks from the water's edge, as well as sessions addressing these issues in the context of particular parcels. Property owners in the MHP Area and adjacent areas were invited to present their thoughts on the redevelopment of their parcels to the Committee as well.

One of the areas of concentration is the exploration of ways to activate the waterfront and watershed areas of the South Boston Waterfront. In October, the Fort Point Channel Working Group was formed to address the unique and complex issues associated with the activation of Fort Point Channel. The Working Group studied a variety of issues related to the Channel, including sedimentation in the Channel, water quality, historic preservation and possible new uses and structures designed to attract people to the Channel and provide opportunities to get out onto the watershed. They then developed a series of planning goals. The Working Group is now finalizing a Request for Proposals seeking a consultant to develop a public activation plan for the watershed and edges of Fort Point Channel. A more detailed discussion of the Fort Point Channel Working Group and the Fort Point Channel Watersheet Plan can be found in Chapter 9, Fort Point Channel.

The Committee also has been studying baseline requirements, substitute provisions and offsets for substitute provisions. Two additional working groups were formed to study issues related to the maintenance of public areas and development of civic events as an activation strategy. A preliminary draft of baseline maintenance standards for the South Boston Waterfront is included as Appendix 2. The initial report of the Civic Events Working Group is included as Appendix 3. Final recommendations from these two working groups will be submitted to EOEA as amended pages to this Municipal Harbor Plan.

The public process for this Municipal Harbor Plan has also included meetings with community leaders and community groups, such as the South Boston Design Advisory Committee, as well as open public meetings. The South Boston Design Advisory Committee appointed a sub-committee to work with the MHPAC.

In March 2000, the BRA circulated a preliminary draft of this Municipal Harbor Plan for public comment. Since that time, the BRA has received many comments on the draft, at MHPAC and community meetings and in written form. The final draft incorporates many of the ideas, suggestions and comments that we received. The result is a better Municipal Harbor Plan, and a better waterfront for all.

3.0 HISTORIC AND PLANNING BACKGROUND

Boston's waterfront spans 43 miles of pier and wharf edges, bulkheads and natural shoreline from its northernmost point in Charlestown to its southernmost tip at the Milton town line. This expanse of waterfront property is home to an equally expansive array of commercial, industrial, residential, open space and other public interests and uses. But this mix of uses that we value so highly is a fairly recent phenomenon. From the time of the earliest American colonists in the mid-seventeenth century until the 1960's, virtually all developed areas of the Boston waterfront were devoted to commercial and industrial port activities.

3.1 GENERAL HISTORY OF BOSTON HARBOR

Throughout the seventeenth, eighteenth and nineteenth centuries, the Port of Boston generated great economic prosperity. From the earliest days of the American colonies, ships carried passengers and goods within the Harbor and to other American colonies, and to foreign ports in Europe, Bermuda and the West Indies. Boston's most valuable export commodities included fish and rum, and manufactured goods, such as shoes, boots, textiles and carriages. To keep up with the demands of trade, transportation and the fishing industry, Massachusetts became a center of shipbuilding activity. Private citizens were encouraged to build piers and wharves to provide a more uniform shoreline to better serve the needs of the port's fleet of trading and fishing vessels. The waterfront area was alive with commercial activity.

Shipbuilding activity reached a frenzied level before the Civil War during the clippership era of the 1840's and early 1850's. The California gold rush created an enormous demand for all varieties of consumer and commercial goods, and Boston-made clippers were the fastest ships of their day, breaking speed records again and again for travel to California as well as Europe, South America and the Far East. The clippership era was glorious, but brief. The clippers required ten times the number of crew members as a comparably-sized schooner. As the demand in California eased, and the clipper's superior speed no longer commanded a sufficient premium to justify its use, the clippership was replaced by more economical schooners and steamships. The last of the clippers left Boston shipyards in 1854.

Also during the first half of the nineteenth century, patterns of trade began to change. The domestic coastal trade, always important to Boston's economy, began to outpace international trade in the late 1820s. Boston's manufacturing industries obtained many of their raw materials, such as cotton, wool and cane sugar, from other American ports. The finished products were traded at these same ports, as well as other coastal and foreign ports. The Port of New York, aided by the completion of the Erie Canal in 1825, became the center of American international trade. Grain from the American West traveled through the Erie Canal and the Port of New York to foreign ports. Likewise, the ever-growing American West provided a new market for foreign imports.

Rail connections established between Boston and Albany, Boston and New York City and Boston and Maine that extended directly to some of the more important docks revived the port's international trade, although the domestic trade remained of primary importance. The railroads erected new wharves, warehouses and large grain elevators to handle the increasing volume of merchandise. The new facilities were located primarily in Charlestown, East Boston and filled bays surrounding South Boston, beginning the migration of the industrial port to these areas of Boston Harbor. As the foreign trade became concentrated in these three areas, the downtown wharves were used mainly by the coastal trade and excursion and fishing vessels.

The migration of the industrial port to South Boston, East Boston and Charlestown continued into the twentieth century. The bulk of the port's fishing fleet moved from the over-crowded T-wharf to the new Fish Pier after it was completed in 1914. Large grain and coal export terminals backed by enormous rail yards dominated South Bay and the East Boston waterfront. Also during this period the presence of the United States military in Boston Harbor increased. The Charlestown Navy Yard was established in the 1790s, but by the end of World War II, the Navy also had three annexes and a naval air station on Boston Harbor. As commercial activities continued to shift to other sectors of the Harbor, many of downtown wharves fell into disrepair.

3.2 HISTORY OF THE SOUTH BOSTON WATERFRONT

Much of the area now known as the South Boston Waterfront was originally tidal marsh, with South Boston a peninsula of about 600 acres separating Boston Harbor and South Bay from Dorchester Bay. South Boston's annexation to the City was accompanied by legislation to allow landfill to create new sites for commercial development.

Transportation links to the mainland helped facilitate the earliest commercial, residential and industrial activity in the South Boston Waterfront in the early 1800s.

The history of the South Boston Waterfront reflects the district's continuing role as a center for port and industrial activities. Major industrial growth began after 1810. Iron and glass foundries and shipyards dominated growth throughout the first half of the nineteenth century, including the glory of Boston's clipper ship era. To a lesser extent, brickmaking also developed at this time as a significant local industry. After the arrival of the Old Colony Railroad in 1844, two locomotive works were completed. The first petroleum refinery in Boston was established in 1861 and oil works soon followed.

Additional space was soon needed for new development, leading to extensive landfill operations. In 1833, 75 acres of mud flats were filled for a large railroad terminus for the Boston and Worcester railroads. Founded in 1836 and a pioneer in reclaiming the mud flats, the Boston Wharf Company began a series of landfill operations along the Fort Point Channel that were not completed until the last quarter of the nineteenth century. In 1837 Fort Point Channel itself was laid out and the first granite seawalls constructed. In 1866, the Board of Harbor and Land Commissioners recommended filling almost 750 acres of

tidelands as part of a large project to create additional land, piers and channels in South Boston. Eleven wharves were added to South Boston's port facilities.

Fort Point Channel was gradually crossed by with bridges connecting Boston and South Boston. The Broadway Bridge was completed in 1871. Lift-spans were constructed at Congress Street in 1875, at Summer Street in 1900, and at Northern Avenue in 1908. Between 1895 and 1900, South Boston became the center of the wool trade, and for many years thereafter, nearly all the lumber and sugar brought into South Boston was stored on Boston Wharf property just east of the Channel. Much of this area now forms the Fort Point Historic Subdistrict, which is eligible for listing on the National Register of Historic Places.

The late nineteenth century witnessed the decline of previously dominant industries, including iron foundries and glassworks. The Harbor was shifting from an active mercantile port to a center for steamship lines and railroad ferry terminals. At the turn of the century, South Boston was a center for rail operations. The combination of shipping, docks, wharves and rail facilities made South Boston the heart of Boston's industrial waterfront. New manufacturing, drawn to the experienced South Boston labor force and proximity to downtown, tended to locate in the area south of the wharves. In 1905 the Gillette Safety Razor Company opened its South Boston plant, which comprises much of the Fort Point Industrial area of today. Boston's fishing fleet consolidated in South Boston, giving rise to a robust seafood processing industry that continues to this day. The Boston Fish Pier, built in 1914, was the center of this activity. Commonwealth Pier, also completed in 1914, supported the largest pier building in the world at the time, used to handle both freight and passenger traffic intermodally (truck and train to water vessels).

In 1920, the U.S. Government purchased land in South Boston to create the South Boston Naval Annex. At the same time, the U.S. Army also purchased adjacent land from the Commonwealth for the South Boston Army Base. The Base was in use during World Wars I and II and the Korean War.

The South Boston Waterfront's role as a shipping and distribution center began to decline in the 1940s. As trucking and airfreight outpaced rail and shipping, the area's advantage as an intermodal distribution point was eclipsed.

Throughout its history, the South Boston Waterfront also has been a draw for its residential enclave. In 1828, with the opening of the North Free Bridge, residents of Boston began moving to South Boston in large numbers. At the time of its annexation to Boston in 1804, only 60 families were documented as living there. By 1830, the population reached 2,200; thirty years later, it grew to 13,000. Between 1850 and 1870, the number of South Boston residents tripled. After the Civil War, the population growth in South Boston slowed, as it did elsewhere in the City. South Boston's peak population of 72,000 was reached in 1910, around the same time that employment was shifting from industrial jobs at local mills, foundries and factories to retail jobs in shops and stores, primarily in the downtown.

As industry was evolved, the growing South Boston neighborhood began to enjoy the waterfront for recreation. In 1918, a wooden bridge connecting Marine Park and Castle Island was opened, allowing thousands of visitors and South Boston residents to enjoy views of the water set against the Boston skyline. In order to further promote recreation in the South Boston neighborhood, the city devoted an area of reclaimed land for a public playground called Commonwealth Park. The park is bounded by First, Second, M and O Streets and houses a gymnasium building.

3.3 REVITALIZATION OF THE WATERFRONT

In 1956, the Massachusetts' legislature established the Massachusetts Port Authority (Massport) to oversee port development and operations in the Commonwealth. Massport began acquiring dilapidated port properties with an eye toward their rehabilitation and modernization. The shipping industry experienced a dramatic change in the mid-1960s with the advent of container shipping. To accommodate the specialized needs of standardized container shipping, Massport developed new facilities in South Boston and Charlestown.

During the 1970s and 1980s, the City of Boston made land acquisitions to promote industrial and maritime industrial activities in South Boston, including the area comprising the Boston Marine Industrial Park, which houses approximately 200 businesses and employs some 3,800 workers.

In the 1960's, Boston experienced an economic revival, spurred in large part by the federal government's national urban renewal policy. To the North End and Downtown waterfronts, urban renewal brought the revitalization of dilapidated piers and wharves and the conversion of historic granite warehouses to residential use. This redevelopment came with a price, however, as this area of the waterfront became increasingly privatized.

Maritime industrial activities in Boston Harbor continue to play a vital role in the Massachusetts economy. In 1996, Massport and the BRA joined forces to create the Port of Boston Economic Development Plan to make the port more competitive in the global marketplace and benefit all who live, work and visit Boston's Harborside. The Port Plan identified major land areas to be preserved for the long-term viability of the port within Charlestown, East Boston and South Boston and recommended measures to ensure the competitiveness of Boston's port industries. Section 6.2 of this Municipal Harbor Plan is an updated summary of the Port Plan.

In the early 1980's, the City developed the Harborpark Plan. The hallmark of the Harborpark Plan is public access to the waterfront. The Harborpark Plan is a series of policies recognizing the public's right of access to the waterfront, together with a set of urban design guidelines to ensure that new development is compatible with its existing character. The Harborpark Plan mandates lower building heights, the use of masonry and other natural materials for new construction, and a public waterfront walkway along the

perimeter of new projects. In 1990, simultaneously with the submission of its Municipal Harbor Plan, the City codified the Harborpark Plan in the Harborpark zoning articles (Boston Zoning Code, Articles 42A - 42F).

Boston's waterfront currently is home to a wide variety of uses, from parks and recreational areas to port industrial uses. Each of the City's waterfront neighborhoods has its own unique mix of uses. The East Boston waterfront is a mix of industrial port activities and water-dependent uses, parklands and residential uses. The Charlestown waterfront also consists of industrial port activities, as well as housing, open space and the U.S.S Constitution. The North End waterfront is primarily residential in nature. Downtown is a mix of hotel, residential, cultural and commercial uses. The Fort Point Channel is host primarily to industrial and commercial uses. The South Boston Waterfront includes commercial, civic, industrial and marine industrial users. Figures 3-1 to 3-5 display graphically the multitude of uses in each of these waterfront areas.

The goal of this Municipal Harbor Plan is to continue our efforts to bring about the Harborpark vision of the waterfront - a vibrant, mixed-use area with a variety of special destinations that attract people from all walks of life on a year round basis. The waterfront should offer something for everyone - places to relax, places to learn, places to live and places to work. There are many different interests and elements at work on Boston's waterfront. With 43 miles of coastline, there is room for them all.

Development interest in Boston's waterfront is very strong. Our vision will not come about on its own. Careful planning and coordination is required. A waterfront as diverse as Boston's demands a Harbor plan that is broad enough to encompass all of its many assets and farsighted enough to maximize their potential in a manner that benefits all of the residents of the Commonwealth. This is a tall order, but no more than the City deserves.

[The text in this section is extremely faint and illegible. It appears to be a multi-paragraph document, possibly a letter or a report, with several lines of text per paragraph. The content is not discernible.]



- Legend**
- Commercial
 - Government
 - Institutional
 - Industrial
 - Residential
 - Mixed Use (Comm./Res.)
 - Open Space/Public Plaza
 - Non-built Space
 - Existing Water Transit Stop
 - Existing Service Site
 - Water Transit Route
 - Designated Port Area
 - Local Bus Route
 - MBTA Subway Lines

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**Figure 3-1 Land Use Map
East Boston Waterfront**

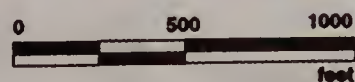
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**Figure 3-2 Land Use Map
Charlestown Waterfront**

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 2. The second part discusses the methodology used in the study.
 3. The third part discusses the results of the study.
 4. The fourth part discusses the conclusions of the study.
 5. The fifth part discusses the implications of the study.
 6. The sixth part discusses the limitations of the study.
 7. The seventh part discusses the future research.
 8. The eighth part discusses the acknowledgments.
 9. The ninth part discusses the references.
 10. The tenth part discusses the appendices.



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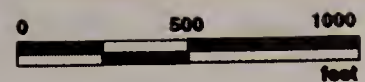


Figure 3-3 Land Use Map
North End and Downtown Waterfront

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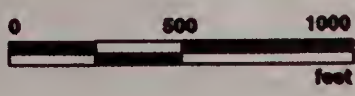
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Legend

- Commercial
- Government
- Institutional
- Industrial
- Residential
- Mixed Use (Comm./Res.)
- Open Space/Public Plaza
- Non-built Space
- T Existing Water Transit Stop
- Existing Service Site
- Water Transit Route
- Designated Port Area
- Local Bus Route
- MBTA Subway Lines
- MBTA South Boston Transitway

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**Figure 3-4 Land Use Map
Fort Point Channel**



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Figure 3-8 Land Use Map
South Boston Waterfront

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4.0 SUMMARY OF THE PUBLIC REALM PLAN

The South Boston Waterfront, shown in Figure 1-1, comprises 1025 acres of land lying between Fort Point Channel, Boston Inner Harbor and Conley Terminal – the City's deep-water marine cargo terminal. Major portions of this area are underutilized and were converted to open parking lots for commuters as industry left the center city. The South Boston Waterfront is an unusual opportunity for Boston to build a new mixed-use neighborhood within walking distance of downtown and public transportation and that possesses so many other land and water-based resources.

The South Boston Waterfront District is the next growth frontier for Boston. Transformed largely through massive landfill operations throughout the nineteenth century, the South Boston Waterfront District became a combination of shipping, docks, wharves and rail facilities, making this district the heart of the City's industrial waterfront. Economic growth and concentrated residential development should be targeted for urban areas like this where we can figuratively build upon public infrastructure investment and literally build on land that already has been transformed from its natural or rural spaces.

In recent years, this district has undergone major transformation. Twenty billion dollars in public infrastructure improvements recently completed or currently underway will greatly improve access to the district, create opportunities to expand Boston's commercial economy and significantly enhance the value of real estate in the district. These projects include the Central Artery/Third Harbor Tunnel Project, which connects the area to Logan Airport and the regional highway system; the Silver Line/Transitway, which connects the South Boston Waterfront District with Downtown, the South End and Roxbury; and the clean-up of Boston Harbor, which has enhanced the quality of the waterfront for public enjoyment. A number of infrastructure improvements in the working port, including a new state-of-the-art seafood processing center, have enhanced Boston's shipping and related industries. The new federal courthouse and Seaport Hotel both opened in 1998, and the Boston Convention and Exhibition Center, an estimated \$700 million dollar, 1.7 million square foot project, is scheduled to open in 2003.

This new infrastructure and development creates a capacity for considerable new growth. But it also challenges landowners, their architects and the City to create a new neighborhood that has the same livable qualities for which our other neighborhoods are known. In January 1999, the BRA released a Public Realm Plan for the South Boston Waterfront District. It presents a framework to guide future public and private investment in the district while maximizing opportunities for business expansion and job creation, access to the Harbor, use of an attractive open space network and civic activities, and new places to live. The significant public and private investment will help the City achieve its goal of creating a vibrant, mixed-use neighborhood.

4.1 FIVE PRIMARY PLANNING OBJECTIVES

The Public Realm Plan for the South Boston Waterfront District is the culmination of over two years' work with planners, design professionals, environmentalists, elected officials, community residents and concerned citizens. The BRA held over thirty-five community meetings and over one hundred smaller sessions to achieve consensus around a set of basic objectives that guided development of the plan:

- Promote access to Boston Harbor as a shared natural resource
- Preserve and enhance the industrial port
- Plan the district as a vital, mixed-use neighborhood
- Develop the district as an integral part of Boston's economy
- Enhance the South Boston community

These five objectives are the foundation of the Public Realm Plan, which began with an analysis of the urban character of the South Boston Waterfront District and the rest of the city. The analysis then led to a number of design principles, which ensured that the final plan was in keeping with the present context of Boston's character. Finally, the physical plan provides concepts and language that lay out the vision for the district.

The five planning objectives above are based upon an understanding and balancing of the needs and aspirations of residents, property owners, advocacy groups and business and port operators. They form the policy context in which the BRA conducted the analysis of the South Boston Waterfront's role in the City of Boston.

4.1.1 Promote Access to Boston Harbor as a Shared Natural Resource

Boston Harbor - including Fort Point Channel and the nearby Harbor Islands National Park - is the defining feature of the South Boston Waterfront District. While the Harbor has always been our most valuable natural resource and center of economic activity, its qualities as a public resource have been greatly enhanced in recent years by the public investment in cleaning Boston Harbor through the building of the Deer Island Sewerage Treatment Plant, and by opening up the water's edge through enforcement of the public's historic rights in the tidelands. All aspects of the Public Realm Plan recognize and promote the essential relationship between the land and the water, and new development must occur within this context. The public realm system must embrace the surrounding waters as part of the South Boston Waterfront District and the citywide open space network that connects the district to Downtown, the North End, East Boston, Charlestown, the South Boston residential community, Dorchester, the Emerald Necklace and Harbor Islands. As the district grows, it also must be linked to the downtown and other waterfront neighborhoods and to the Boston Harbor Islands National Park Area through Boston's expanding water transit system.

View corridors, pedestrian ways, streets and transit must create direct links to the water's edge for port industry, neighborhood housing, commercial activity, water transportation, fishing, recreation, civic uses, and quiet contemplation by the sea. The rich maritime industrial history that is still reflected in actively used structures such as the Boston Wharf warehouses, Boston Fish Pier and Dry Dock 3 in the Marine Industrial Park, and in the industrial imagery of the Black Falcon Terminal, must be protected and integrated into new development.

The height of new development in the South Boston Waterfront District must also reflect Boston's traditional neighborhoods that are lower in height as they approach the water's edge. In addition, uses, particularly at the pedestrian level, must be publicly accessible to welcome residents, visitors and workers to the Harbor. New development must recognize that both the Harbor location and recent public investment have added to its value and return benefits to the public that in turn enhance the waterfront. Most importantly, the edge where the water meets the land must be preserved in perpetuity for the public to enjoy.

4.1.2 Preserve and Enhance the Industrial Port

Boston's economy has always been dependent upon the City's relationship to the sea. Evolved over the centuries, the industrial port still thrives today with its center firmly anchored in the South Boston Waterfront District, and includes the Boston Marine Industrial Park, Conley Marine Terminal, the Black Falcon Cruise Ship Terminal, Boston Fish Pier and supporting backlands. The City has invested over \$40 million in the Marine Industrial Park for the reconstruction of piers, berths, roads, dry-docks and buildings. Massport has invested \$50 million in Conley Terminal's cranes, berths and backlands to handle the latest generation of cargo ships.

While the consolidated port is a reminder of Boston's extensive seafaring history, it is primarily a source of decent wage jobs for Boston residents and of revenue entering our economy. Over 4,800 people are employed at the Marine Industrial Park and Conley Terminal alone, and there are three times as many indirect jobs created from their work. More than \$8 billion worth of goods flows through the port every year, and thousands of tons of food, computers, gasoline and other essentials pass over its docks every day. The Public Realm Plan must protect the port and its boundaries, including the provision of adequate buffers between new uses and existing industrial ones, and provide convenient truck movement into and out of the port.

4.1.3 Plan the District as a Vital, Mixed-Use Neighborhood

Boston is considered by many to be one of the most livable cities in the nation. One of the qualities that sets us apart is our cohesive neighborhoods that provide attractive places to live, work, play and participate in community life with convenient access to a broad range of goods and services. A primary goal of the Public Realm Plan is for this district to emerge as a lively, mixed-use neighborhood in keeping with this strong, long-standing

tradition. To achieve this goal, three essential components are detailed in the Plan: a critical mass of residential uses, active civic and public uses, and safe and convenient pedestrian, street and water transit systems.

First, one of the disadvantages of being such a desirable City is that the cost of housing in the neighboring South Boston community and throughout the City as a whole is constantly rising. Given the proximity to the Financial District and the opening of the Boston Convention and Exhibition Center in 2003, it is clear that commercial and hospitality uses will expand in the district. It is therefore essential that land use controls that implement the Plan require new housing to be built in order to address current as well as future demands. Residential uses are important beyond their direct relationship to the cost of and demand for housing. They are the heart and soul of a neighborhood, creating life in the community at the end of the workday. They support retail services and public facilities that an office district does not. Residents of a neighborhood also provide the stewardship necessary to maintain and oversee their streets, parks and playgrounds. A relatively small residential and artist live/work community currently exists in the Fort Point Channel area as a solid core for residential growth. Opportunities must also be provided to expand the South Boston residential community along an enhanced D Street, to create new housing along with commercial uses in the Inner Harbor area, and to significantly expand the existing Fort Point Channel community in order to ensure that approximately 4,000 to 8,000 housing units are constructed in the South Boston Waterfront District over the long term.

Second, civic and pedestrian-oriented uses must be an integral part of this new neighborhood. Sound neighborhood planning and zoning can require ground floor public uses in a mixed-use district, but creating new civic uses is more difficult with respect to both financing and ongoing operation. Private property owners and public institutions must work in concert to ensure that civic uses exist to create important public destinations in the area. The South Boston Waterfront District is fortunate in housing a thriving artist community that can also contribute to creating a distinctive character for civic uses and spaces.

Finally, a sound transportation plan – a crucial building block for any new neighborhood – will help people to travel to and from their jobs, homes and other destinations in their neighborhood and throughout Boston with relative comfort and ease. While the district has a nearly completed underground highway system that adequately serves regional through-traffic, more work must be done to develop a transportation system within the district itself. The Public Realm Plan must establish a pedestrian system that takes precedence over cars, links the interior of the district to the waterfront, connects South Boston residents to the waterfront and brings visitors to new activities within the district. In order to become a vital neighborhood, a local street system must be superimposed onto the highway grid and public lands and the water transit system must exceed minimum levels of service to become the travel mode of choice.

4.1.4 Develop the District as an Integral Part of Boston's Economy

Boston is the economic center of the metropolitan area, the Commonwealth of Massachusetts and the rest of New England. It is the regional magnet for professional, business, government, financial, higher education and medical services, as well as for transportation, communication, export, cultural and entertainment services.

The strength of our economy over the long term stems from its diversity and ability to reinvent itself as conditions change. From the shipbuilding and clippership trade in the early nineteenth century which positioned Boston as an international financial center, through our innovative textile and manufacturing era in the twentieth century, to our strong financial services, educational, medical and tourism economy today, Boston has always been able to build upon our assets to maintain our economic strength.

The single most important aspect of this economic diversity is in its provision of a wide range of jobs for Bostonians at all skill levels which eases the stress on employment during periods of economic downturn. The economy of the South Boston Waterfront District must continue to develop as a diversified system within the district and the City as a whole.

Today the South Boston Waterfront District is a microcosm of a diverse regional economy. The City of Boston's Marine Industrial Park employs 3,800 people and has been expanding its activities. The first phase of a new seafood processing district opened in 1998 and a second phase is now under construction. The \$35 million International Cargo Facility now under construction will employ 800 people. Container volume at Conley Terminal is expected to continue its growth in volume, and cruise ship landings should double by the year 2004.

In the financial services sector, Thompson Financial recently completed 450,000 square feet of rehabilitated office space which will bring 2,000 employees into the Boston Wharf district. Both the new federal courthouse and the Seaport Hotel opened in 1998 and two World Trade Center office buildings have been proposed adjacent to the hotel, one of which is now under construction.

In addition to the port itself, the one development with the greatest economic impact on the district will be the Boston Convention and Exhibition Center (convention center), authorized by the City and Commonwealth in 1998 and now under design. The convention center will serve as a catalyst for new growth, particularly within the hospitality market. It is anticipated that over the long term, 5,000 hotel rooms will be built in the district creating almost 5,200 new jobs. Retail, service, cultural and entertainment establishments also will grow in response to increased convention center activities.

One of the primary planning goals for the South Boston Waterfront District is that it be developed as a mixed-use neighborhood rather than simply as an extension of the downtown Financial District. Because the commercial office market is a critical sector of

our economy, it should be allowed to expand into the South Boston Waterfront District in an appropriate balance with residential, industrial, hotel and other uses. Historically, Boston as a whole has absorbed approximately 800,000 square feet of new office space a year, and over the next twenty to thirty years, the South Boston Waterfront District can meet a portion of this demand. It is anticipated that, over the long term, approximately four to five and a half million square feet of office space will be built in the District, primarily between Northern Avenue and Summer Street.

Because the South Boston Waterfront District will be developed as part of a diverse city economy, its complete build-out is expected to take from two to three decades. The build-out generated by the Downtown Waterfront and Government Center Urban Renewal Plans, begun in the 1960s, is only now nearing completion. The Charlestown Navy Yard mixed-use development plan, started 20 years ago, is currently only half-complete. It is similarly expected that development of this district will span several economic cycles. Growth will be monitored through the BRA's review process to ensure that the required balance of uses and proportions of total build-out are met. Ultimately we anticipate that within the Inner Harbor and Fort Point Channel areas of the waterfront there is the capacity for about 16 million gross square feet of residential, commercial, hotel and public uses.

4.1.5 Enhance the South Boston Community

Because the South Boston residential community lies immediately to the south of the district, it has the greatest potential for being impacted by the District's growth. The Public Realm Plan must incorporate mechanisms to benefit South Boston in order to outweigh burdens of growth on the community.

The Plan must ensure that new jobs created in the South Boston Waterfront District are actively marketed through job training programs and the South Boston Jobs and Development Resource Center. Furthermore, moderate-income housing must be available in the district. To this end, the Enhancement Zone along D Street should be developed to accommodate community housing and at the same time to connect South Boston to the waterfront. In addition, a number of vacant sites within the community (already identified and presented to the neighborhood) should be a focus for new community housing.

In relation to the principle of enhancing South Boston and the City in general, the Plan includes a maximum as-of-right zoning height of 150 feet. Any height in excess of 150 feet will be considered only through a Planned Development Area public zoning process, in order to weigh community benefits against the additional height under consideration. Developers can exceed this base height by providing appropriate public realm and community benefits.

Improvements to the public realm committed to as part of the convention center will also benefit the community, particularly by enhancing pedestrian access into the district and to the Harbor. In particular, improvements along D Street will create an inviting pedestrian

corridor, drawing South Boston to the waterfront just as Dartmouth Street draws the South End to the Esplanade.

4.2 FEATURES OF THE PUBLIC REALM PLAN

The Public Realm Plan was based on extensive analysis of the South Boston Waterfront District in relation to other neighborhoods in the City, the role of the working port, and the use of Boston Harbor as an important transportation corridor and open space resource. Its features are highlighted below.

4.2.1 District Organization

The Plan proposes a system of streets and blocks that provide a finer grained grid pattern than what currently exists in the area, promoting the physical, visual and functional integration of the area with downtown and adjacent neighborhoods. The proposed distribution of land uses further emphasizes the creation of mixed-use neighborhoods and public open space, focused around three primary areas, each defined by a body of water:

Fort Point Channel, a critical junction where downtown and the South Boston Waterfront District come together, has the unique potential to be a dynamic new civic place in the city and the setting for the most intimate and varied pedestrian experience on the entire waterfront. It would include a mix of public, civic, hotel, office, residential and retail uses. Fort Point Channel includes the following subdistrict areas that at least partially fall under Chapter 91 jurisdiction:

Fort Point Channel itself will be an intensely public area with civic and public uses in and along the Channel and a continuous Harborwalk, providing a place of coming together for the downtown and the South Boston Waterfront District. Retail, civic/public, museum, recreational and entertainment uses will be maximized in the first and second levels along all building frontages lining the promenades. Floating piers are envisioned running down the center of the Channel to bring the public out onto the watersheet itself.

Fort Point Historic Subdistrict will include mixed-use office, institutional, live-work spaces and loft residential uses, with ground floor public and retail uses. The new "Wormwood" neighborhood, located in the southern portion of this subdistrict, will be residential with supporting retail services.

Fort Point Industrial Subdistrict will continue to represent an industrial enclave within the City. Access to the subdistrict's waterfront will be provided in a manner that is compatible with the area's existing industrial users.

The Piers, as a place of large-scaled piers and water slips, wide streets, the convention center and new, mid-density commercial uses, should become a new destination for public

activity in the City. It includes the following subdistricts:

Inner Harbor, including Fan Pier and Fan Pier Cove, which will consist of mixed-use, institutional and residential uses; visitor accommodations of an intimate waterfront scale; retail, food, entertainment, leisure uses and activities at both street and second levels; and maximum retail frontage along old Northern Avenue. Pier 4 and the World Trade Center Pier are intended for transportation use, with tourist and visitor-related services such as retail, entertainment, hotels and parking, and commercial and residential uses.

The Convention Center will be a catalyst for a wide range of related uses and activities in the District. Scheduled to open in 2003, it will, when fully built, attract some 500,000 delegates annually to Boston and will generate an infusion of direct spending from convention delegates and tourists at hotels, restaurants, retail shops and other businesses that will help support the economy of the area.

Enhancement Zone, located east and south of the convention center was created with the assistance of South Boston community representatives. The Enhancement Zone will be a location where affordable housing can be constructed.

Reserved Channel/Working Port provides a large infrastructure capacity for maritime activities and is home to many of Boston's port businesses. Predominantly east of D Street, this area would remain maritime industrial and industrial.

At final build-out projected over 20 to 30 years, new development in the South Boston Waterfront District could be in the range of between 16 and 20 million square feet, exclusive of the convention center.

4.2.2 Street and Block Plan

The proposed system of streets and blocks, shown in Figure 4-1, provides a finer grained grid pattern than what currently exists, promoting the physical, visual and functional integration of the South Boston Waterfront District with downtown and adjacent neighborhoods. The roadway network is organized around major streets, each with its own function and character.

Three east-west streets connect the downtown to the South Boston Waterfront District. New Northern Avenue, the northernmost east-west connector, will serve as the district's major waterfront boulevard – the signature street for both pedestrians and vehicles. It threads together a number of important neighborhoods and places along nearly the entire Boston waterfront, and provides direct connections with Interstate 93 ramps. Summer Street, a prime address within the district, can be a main street for downtown and the district, linking many facilities and neighborhoods of citywide importance. The Public Realm Plan proposes new vehicular and pedestrian connections from the elevated Summer Street to the streets at grade, north and south, to better organize the blocks and connect the



Figure 4-1 Public Realm Plan - Open Space Plan



district's interior to the water. Congress Street will be the primary east-west street feeding local traffic to the highway ramps, including airport and regional highway access.

North-south streets are envisioned as memorable neighborhood streets. The most westerly of these is New Wormwood (currently known as West Service Road), and will be developed as a wonderful tree-lined pedestrian-oriented street from the St. Vincent's neighborhood to the water, where new, infill and rehab construction will build on the existing residential core and artist community. D Street, the north-south connector through the Piers area, will link the South Boston residential neighborhood with the waterfront, and provide a good location for the expansion of community housing. Finally, Old Summer Street (Pappas Way) has the potential to provide open space connections from Broadway and Telegraph Hill along the Back Basin to new Northern Avenue.

4.2.3 New Housing

New residential development in the South Boston Waterfront District is important for two reasons. First, having people who live in the area at night will complement those who work there during the day, creating a 24 hour neighborhood. Second, housing is in short supply throughout the City, particularly in the neighborhood of South Boston. Creating housing units in the district ensures that workers who will fill these newly created jobs will have places to live and will not drive up housing prices in adjacent neighborhoods. The BRA is calling for the creation of 4,000 new housing units in the South Boston Waterfront District and neighborhood over the next decade, and 8000 units over the next two to three decades. This will result in approximately 40 percent of the total development in the area being residential uses, the same percentage as in the Back Bay. The new housing must have an affordable component to accommodate a mix of resident income levels. Residential development will be dispersed throughout the district, but concentrated in particular within the Wormwood neighborhood and along D Street east of the convention center.

4.2.4 Open and Civic Space

The BRA has outlined an open space network, shown in Figure 4-1, that will have the same relationship to the district that the Boston Common and Commonwealth Avenue Mall have to the Back Bay. Several major parks, including one at the end of Pappas Way in the Reserved Channel area, one between Fort Point Channel and the convention center near Wormwood Street in the Fort Point Channel area, and one on a new pier in the Fan Pier Cove, will draw visitors in the same way as Post Office Square and M Street Park now do. The open space plan is organized as a sequence of experiences that will create the special places of each subdistrict. Harborwalk comes into the Seaport as an extended esplanade and linear park. At Fan Pier Cove, Harborwalk leads to a new public pier and civic space. Fort Point Channel is flanked by promenades on both sides, expanding into a park at the Children's Museum on one side and the Central Artery open space corridor on the other. In the Wormwood neighborhood, a large park space will link the upland area with the waterfront esplanade along the Channel. The convention center will be the site of

a two-acre overlook plaza on Summer Street. D Street will terminate at the water's edge at a prominent open space and 1st Street will be the location of a major neighborhood park at the end of the Reserved Channel. Throughout the District, new civic uses also will be woven into the open space plan. All of these elements are linked together in the public circulation plan for the area, shown in Figure 4-2.

4.2.5 Land and Water Transportation System

The Public Realm Plan seeks to integrate multiple transportation systems into a cohesive, balanced, multimodal network. With input from the Boston Transportation Department, the Commonwealth's transportation agencies, the Conservation Law Foundation and other transportation constituencies, the Plan articulates a vision for transportation to and throughout the district to guide future infrastructure investment. It calls for the construction of the Silver Line/Transitway, with stations at the Fan Pier/Courthouse and World Trade Center (providing access to Congress Street and Viaduct Street). More recently, as part of the convention center planning process, a new station was added with direct access to this facility. The Public Realm Plan also proposed an additional station east of D Street near the entrance to the Boston Marine Industrial Park to service the port.

In order to implement the Plan, further traffic analysis on the proposed recommendations in the Plan was conducted by the Boston Transportation Department, their consultants Louis Berger Associates, and the BRA. The goal of the study was to test the recommendations in the Plan and to arrive at a comprehensive transportation plan and a traffic management strategy for the South Boston Waterfront. The analysis focused on five particular areas: vehicular traffic; truck traffic; transit; pedestrians and bicycles; and parking. A more comprehensive discussion of the study and its recommendations is contained in Section 5.1.

Water transit comprises a significant portion of the transportation plan to ensure that workers, visitors and residents can easily enter and exit the district. Ferry travel for year-round commuters and seasonal recreational users is expected to increase dramatically in the next decade. The City's recently completed Boston Inner Harbor Passenger Water Transportation Plan (Water Transportation Plan) focuses on improving and expanding the capacity of Boston's terminal facilities. A more comprehensive discussion of the Water Transportation Plan as it pertains to the South Boston Waterfront is contained in Section 5.2.

4.2.6 Density and Scale

Reflecting the relationship of other Boston neighborhoods to the Harbor waterfront, the Public Realm Plan articulates building heights and densities to complement the city's existing urban fabric. As shown in Figure 4-3, appreciable height and density will be limited, with concentrations near Silver Line Transit stops and between Summer Street and Northern Avenue, at the front door of the convention center. Heights will slope down from the center in all four directions, toward the Fort Point Channel, Boston Harbor, the

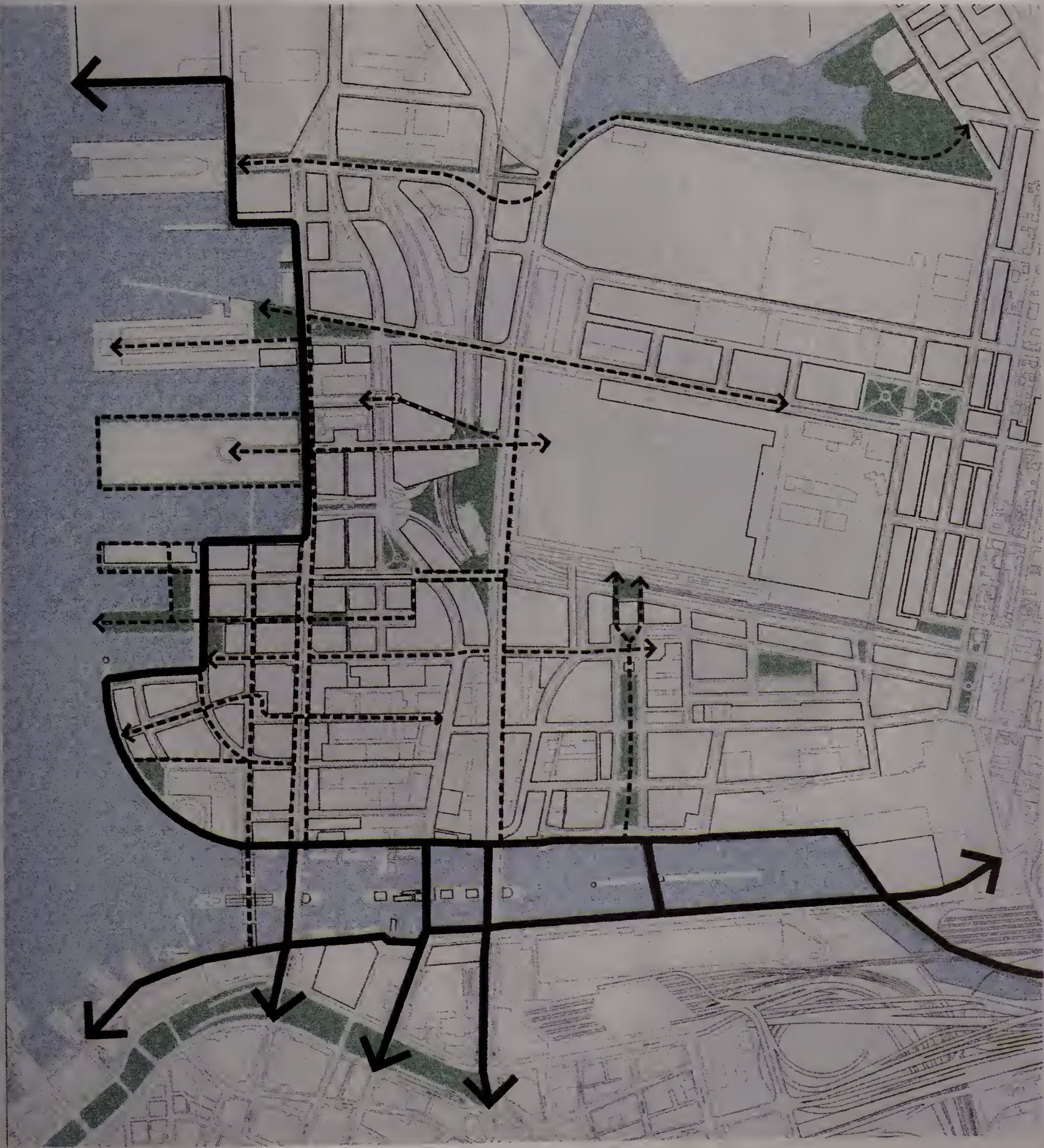


Figure 4-2 Public Realm Plan - Pedestrian Circulation Network

industrial port and South Boston neighborhood. There will be a maximum interim height of 150 feet; developers can build above this height only if they propose public realm and community benefits that will earn allowances beyond the base height. The downtown and Back Bay will continue to define the Boston high rise skyline, and only a few buildings in the district will approach a height of 300 feet.

4.2.7 Implementation

This Municipal Harbor Plan is one of the City's implementation mechanisms for those portions of the South Boston Waterfront that are within Chapter 91 jurisdiction. As in all other parts of the City, the Boston Zoning Code (BZC) will be the primary mechanism to guide and regulate private development in accordance with the Public Realm Plan.

The BRA will draft a zoning amendment for the South Boston Waterfront to establish new zoning for those portions of the South Boston Waterfront not located in the BMIP or the DPA, including the MHP Area. In addition to establishing use and dimensional regulations, the new zoning also will regulate a number of other aspects of development. General urban design guidelines for the South Boston Waterfront designed to foster the urban character particular to each area were established in the Public Realm Plan. A formal set of design guidelines will be adopted as part of the final zoning. Permanent zoning also will establish those areas or sites where Planned Development Areas (PDAs) are allowed. A PDA is a special type of zoning overlay district that allows for a more comprehensive balancing of the impacts and benefits of a project.

The Waterways Regulations give a municipality the opportunity to determine whether a waterfront project which is nonwater-dependent serves a proper public purpose ("Section 18 Determination"). New zoning for the South Boston Waterfront will establish and codify detailed criteria to be evaluated by the BRA in making a Section 18 Determination with respect to new nonwater-dependent use projects located in the MHP Area.

Finally, the City's extensive development review process found in Article 80 of the BZC provides the City with a framework and mechanism for evaluating the impacts of a project, including transportation, environmental protection, urban design, historic resources and infrastructure systems. The Article 80 process includes opportunities for public comment and participation throughout.

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5.0 TRANSPORTATION OVERVIEW

Central to the planning of the South Boston Waterfront has been the idea that the transportation network should work in tandem with the urban vision, character and uses of the district. Up until now, the vast highway infrastructure under construction in the area has been its defining feature. The Public Realm Plan, with its emphasis on urban scale and connections to the Harbor, changes that focus. Most importantly, the Plan overlays a street and block plan onto the highway system that is the basis for new development. Adoption of the street and block plan will enable the City to control the scale of buildings, their relationship to public spaces, and ultimately the overall urban design character of the district. A carefully designed street and block plan will also improve vehicular, pedestrian and bicycle circulation.

With the completion of the Central Artery/Tunnel Project (CA/T Project) and the South Boston Piers Transitway portion of the Silver Line/Transitway, the South Boston Waterfront will have excellent connections to the regional highway and transit systems. The area also will benefit from improved pedestrian and bicycle connections as part of new local street construction. Truck access will be improved through the completion of the South Boston Bypass Road, a commercial vehicle route that connects to the Massport Haul Road. Rail access will be maintained to the Port. The transportation study recently completed by Louis Berger & Associates assessed infrastructure capacity and made recommendations where necessary for additional improvements.

In addition to land-based transportation, the extensive waterfront of this area is ideally suited to the use of water transportation. Water transportation can play a critical role in the development of a vibrant South Boston Waterfront, with gateway terminals providing year-round activity and ferry routes providing efficient and enjoyable links to other Harbor destinations. The BRA recently completed the Boston Inner Harbor Passenger Water Transportation Plan which focuses on terminal facility siting, development and management.

5.1 SOUTH BOSTON TRANSPORTATION STUDY

South Boston is currently undergoing tremendous changes, both in its transportation system and its land uses. The CA/T Project will extend Interstate 90 through the South Boston Waterfront to connect with the Ted Williams Tunnel. The Massachusetts Bay Transportation Authority (MBTA) is concurrently building a new transit line, the South Boston Piers Silver Line/Transitway (Transitway), through the South Boston Waterfront. These major new infrastructure investments, combined with a new surface street system, will greatly improve access to the South Boston Waterfront. This improved accessibility, combined with the South Boston Waterfront's proximity to downtown Boston, has made this area very attractive for major new land development.

Residents of the South Boston residential neighborhood are understandably concerned

about development in the South Boston Waterfront. Their neighborhood streets are currently congested with commuter traffic avoiding construction on the Central Artery. Although the completion of the CA/T Project will improve traffic access to downtown and the South Boston Waterfront, high levels of new development in the South Boston Waterfront will bring additional traffic. Meanwhile, business owners and employees in the maritime and industrial areas of South Boston are pleased with the prospect of improved highway connections, but are also concerned about new development impeding their access and mobility.

5.1.1 Study Goals and Scope

With these issues in mind, the South Boston Transportation Study has been guided by three main goals:

- Protect the residential neighborhood.
- Preserve the working port and industrial economy.
- Enable appropriate development.

The City of Boston recognizes the importance of proper planning for South Boston, and has undertaken two interrelated planning efforts. The Boston Redevelopment Authority's Public Realm Plan for the South Boston Waterfront, released in February 1999, analyzed the character and the future of the South Boston Waterfront. Based on this analysis, the plan proposed land use principles and urban design guidelines for creating a healthy, vital urban district with strong ties to the existing South Boston residential neighborhood, downtown Boston, and the Boston Harbor.

The South Boston Transportation Study, undertaken by the Boston Transportation Department in association with the BRA and the Massachusetts Port Authority, examines the cumulative transportation impacts of all the land development that is envisioned for the South Boston Waterfront. The study reviews the current state of the transportation system in contrast to the post-CA/T transportation system. The study analyzes the effects of varying levels of land development on the transportation system, identifies issues that may create problems, and proposes alternatives for addressing these problems and improving conditions in South Boston. The study was executed by consultants Louis Berger & Associates, and has entailed extensive community and stakeholder participation.

The study proposes a comprehensive, multi-modal transportation vision for all of South Boston, with consideration of general traffic, public transportation, truck traffic, parking, pedestrians, and bicycles. The study is meant to serve as a guide for assessing the overall status of land development and transportation in South Boston, so that South Boston residents, public officials, land developers, and advocates can use it as a planning tool. It provides a macroscopic perspective on the transportation impacts of development in the South Boston Waterfront, and is not intended as a review or comment on any specific proposal or plan. All development proposals will undergo public review, and be subject to strict state and city regulations. This will include review of transportation impacts as well

as the design of the public realm.

5.1.2 Existing Conditions

The South Boston Waterfront (north of East & West 1st Street) is currently home to approximately 14 million square feet of maritime, industrial, commercial and residential land uses. In addition to these uses, large surface parking lots and major construction areas for the CA/T Project, Transitway, and convention center occupy large portions of the South Boston Waterfront. Downtown Boston, the Ted Williams Tunnel, the South Boston Waterfront's surface parking lots, and its emerging developments are all bringing increased traffic to South Boston. Because the highway and street network is incomplete and many streets are discontinued to accommodate construction, this traffic is creating congestion on the streets of the South Boston residential neighborhood. Maintaining vital truck connections is a continual challenge, given the growing traffic congestion and changing construction constraints. Existing public transportation consists of limited public transit bus and water transportation services, supplemented by extensive private shuttle bus services.

5.1.3 Future Conditions

Transportation conditions in South Boston will change dramatically as a result of the new transportation infrastructure and the anticipated land development in the South Boston Waterfront. When the CA/T Project is complete, the surface streets are restored, and the Transitway is operational, access to the South Boston Waterfront will be greatly improved. This will lessen cut-through traffic pressure on the residential neighborhood and provide better truck route connections. Improved access also will facilitate further development in the South Boston Waterfront, which will attract additional trips. In order to provide information on the effects of land development on the transportation system, the study has analyzed different scenarios for development in the South Boston Waterfront:

- **2010 Scenario.** This scenario is based on widely-used CA/T land use projections for 2010, which include about 27 million square feet of mixed-use development in the South Boston Waterfront (north of East & West 1st Street).
- **2025 Scenario.** This "intermediate" scenario is designed to approximate the maximum mixed-use development program that the currently-planned transportation systems in the South Boston Waterfront can readily support. Under a 2025 Scenario with roughly 31 million square feet of development, the roadway and public transit systems can work acceptably, without excessive impacts on the South Boston residential neighborhood and South Boston's maritime and industrial businesses. [Note: This "capacity-maximizing" scenario applies more accurately to a land development total (31 million square feet in the South Boston Waterfront) than to a date ("2025", which is used for reference)]

- **2040 Scenario.** This represents a projection of the South Boston Waterfront's "full build-out" of about 38 million square feet, which can be expected to take 30 – 40 years to realize. This level of land development is a conservative (fairly high) approximation of the total development that may occur in the South Boston Waterfront (north of East & West 1st Street). This total includes all development proposals that have been made public, as well as estimates of development for which no public proposals yet exist. In order to test the effect of different mixes of land uses, the study examines two alternate full build-out scenarios, "2040 High Residential", which includes a higher proportion of residential uses, and "2040 High Office", which include a lower proportion of residential uses and a higher proportion of office uses.

This study analyzes the new transportation system's ability to accommodate the demands of the projected new development, and diagnoses any shortcomings of the transportation system in accommodating this demand.

5.1.4 Summary of Key Findings and Recommendations

The study examines alternative ways to address transportation capacity issues as they are predicted to arise, and analyzes the effects of implementing each of the various alternatives. The study reviews surface street network changes to improve connectivity and relieve traffic congestion; improvements to the currently-planned public transportation system; parking supply and demand; and requirements for pedestrian and bicycle access. The study makes a series of specific short-term, medium-term, and long-term recommendations. The following is a summary of the study's key findings and recommendations:

Interim Construction Conditions:

- In order to maintain acceptable conditions during the major construction initiatives in South Boston, traffic controls and traffic enforcement must be employed to protect the residential neighborhood.
- Effective truck routes must be maintained, especially considering the potential barriers presented by CA/T Project and convention center construction.

Infrastructure Improvements:

- The new highway, surface street and public transportation infrastructure will greatly increase transportation capacity to the South Boston Waterfront.
- This new infrastructure will relieve traffic pressures on the South Boston residential neighborhood and industrial users, and can support significant new mixed-use development, up to the level included in the 2025 Scenario.

Transportation Impacts of Development in the South Boston Waterfront:

- The highway and public transit infrastructure that is currently planned and under construction can accommodate the trips generated by approximately 17 million square feet of additional mixed-use development in the South Boston Waterfront. This would bring the total build-out of the South Boston Waterfront to approximately 31 million square feet, more than doubling the existing 14 million square feet of development. Therefore, major land development can continue to occur in the South Boston Waterfront without adverse impacts on the transportation system, the South Boston residential neighborhood, or South Boston's maritime and industrial businesses.
- *2010 Scenario.* The new transportation system will be able to support the land development projected for 2010, approximately 27 million square feet (existing plus new).
- *2025 Scenario.* The new transportation system can accommodate the trips generated by the 31 million square feet of development projected for the 2025 Scenario, but these trips begin to saturate the system's capacity. The 2025 Scenario's travel demand brings critical intersections in the South Boston Waterfront to capacity, and relies on very high public transit service levels, especially on the Transitway.
- *2040 Scenario.* The currently-planned transportation system cannot support the travel demand generated by the 38 million square foot full build-out of the South Boston Waterfront. This level of development would require a new, significant transportation infrastructure improvement. The 2040 High Office Scenario would create a more concentrated demand peak than the 2040 High Residential Scenario, and the High Office Scenario would therefore require more capacity than the High Residential Scenario.
- After the completion of the CA/T Project, major increases in highway capacity in Boston's core are unlikely. In addition, the South Boston Waterfront's network of major streets is planned and designed. Although secondary streets will be added, these will not significantly increase the overall roadway capacity. As a result, roadway capacity in South Boston will be essentially fixed with the completion of the CA/T Project.
- Since the roadway capacity in South Boston is essentially fixed, the only feasible way to significantly increase the transportation capacity serving development in the South Boston Waterfront is through new public transit infrastructure. A high-capacity transit line would be required to accommodate development beyond the 31 million square foot threshold of the 2025 scenario.

- Travel Demand Management (TDM) must play a significant role to reduce dependence upon single-occupant vehicle trips. Strong TDM programs are very important even early in the development of the South Boston Waterfront. Although roadway capacity will be more abundant in the early years after CA/T Project completion, travelers to the South Boston Waterfront, especially commuters, should be encouraged to use alternative modes to promote a balanced transportation system.

South Boston Transportation System Analysis and Recommendations:

Street Network

- The study recommends number of surface street improvements in the South Boston Waterfront. These improvements are primarily minor links designed to improve the street network's connectivity, especially for trucks. These street improvements do not have a major effect on overall roadway capacity.
- The land development proposals for the South Boston Waterfront should include secondary streets that subdivide large blocks, distribute traffic, provide improved vehicular access to parking and loading, and accommodate bicycles.

Public Transit

- As the South Boston Waterfront is developed, the public transit system should provide the South Boston residential neighborhood with good connections to the emerging employment and recreational opportunities. The MBTA should investigate providing bus service along D Street to provide connections between the West End/St. Vincent's neighborhood and the South Boston Waterfront.
- In order to deliver the capacity necessary to satisfy the 2025 Scenario, public transportation services (i.e. the Transitway, Urban Ring, water transportation, motor bus) and ridership must be effectively maximized within the currently planned infrastructure.
- In order to deliver the capacity necessary to exceed the 2025 Scenario, and satisfy the 2040 Scenario, the public transit system would require a major upgrade; a high-capacity rail line is the most likely option. The report investigates a number of light rail and heavy rail alternatives for providing service to South Boston.

Parking

- The South Boston Waterfront is governed by the South Boston Parking Freeze, which caps the number of parking spaces that may be provided in this area. The parking freeze, along with the finite roadway capacity, will limit the South Boston Waterfront's ability to accommodate vehicles.
- Controlling negative parking and traffic impacts in the South Boston residential neighborhood may require stricter parking regulations and enforcement. The City of Boston will work with the community on these issues.

Pedestrian and Bicycle

- Good pedestrian access is critical for maximizing public transit use, and for creating a pleasant street environment. Bicycling can be an important component of a strategy to reduce single-occupancy vehicle (SOV) reliance.
- South Boston provides excellent recreational opportunities for pedestrians and bicyclists. It should provide even more when the South Boston Waterfront is developed.
- High-quality pedestrian and bicycle access should be provided. This entails appropriately-sized sidewalks, clear and convenient crosswalks, traffic signalization that respects pedestrians and bicycles, bicycle accommodation, good access to the waterfront, and generous public amenities at the waterfront, including a wide Harborwalk. Land developers should be held to high standards in the design and construction of the public realm on their property.

5.2 BOSTON INNER HARBOR PASSENGER WATER TRANSPORTATION PLAN

In November 1999, the BRA released the Boston Inner Harbor Passenger Water Transportation Plan prepared by TAMS Consultants. This plan focuses on the inner Harbor neighborhoods of Downtown, South Boston, Charlestown, and East Boston. It further develops Chapter 5 of the Public Realm Plan, which contained a water transportation plan, focused on terminals in South Boston and potential new routes in and out of South Boston.

Water transportation can play a critical role in the development of a vibrant South Boston Waterfront, with gateway terminals providing year-round activity and ferry routes providing efficient and enjoyable links to other Harbor destinations.

Ferry travel for year-round commuters and seasonal recreational users is expected to increase dramatically in the next decade, placing higher demand on Boston's terminal facilities. The Passenger Water Transportation Plan focuses on improving and expanding the capacity of these terminals. It is assumed that the various existing and future ferry routes will evolve in response to market demands with changing origin and destination needs around the Harbor over time. Specific ferry terminal sites are proposed in the plan for projected service needs up to the year 2010.

5.2.1 Key Report Findings

- Scheduled year-round commuter transit ferry services, including inner and outer Harbor routes, have the potential to nearly triple in the next decade, from their current level of 1.3 million to 3.8 million annual riders. Seasonal excursion transit services are projected to expand at a similar rate from the current 227,000 to 870,000 riders.

- Over 90% of these riders are expected to pass through downtown terminals with the majority using those in the core area from Long Wharf to Rowes Wharf and the old Northern Avenue Bridge.
- Current terminal facilities including publicly and privately managed docks in the core area are operating at capacity during the peak season.
- Additional public and private dock space and support services are needed in the central terminal area in order to accommodate the projected growth of transit services and other competing excursion ferry demands.
- The greatest demand for increased terminal docking is projected for the central area because of short walking distances to the Financial District, retail core, hotels and visitor destinations.
- The South Boston Waterfront district has the greatest potential for growing ferry service demand from the combined pressures of the water's edge development and the new convention center.
- East Boston will need new and expanded terminals to serve expected new residential growth as well as cultural and open space expansion.
- Charlestown also will need new and expanded terminal facilities to serve the existing community and *U.S.S. Constitution* visitors as well as further development of the Navy Yard.
- A coordination of public and private efforts will be needed to expand ferry services in the central core and surrounding districts. The current ferry terminal docks and services are owned and operated by a diverse array of public and private entities.
- Intermodal passenger connections need to be reestablished for the inner Harbor ferry network, including pedestrian, bicycle, transit, and other modes.
- An action plan is needed so that implementation of high priority projects can begin at once, and that mid-term terminal needs can be identified in advance and reserved for future expansion.

The critical challenge is to determine how and where to provide appropriate terminal and boating facilities to encourage full growth of the ferry industry in response to the increasing demand for new routes and services.

5.2.2 Routes and Services

Local and coastal ferries were once the principal means of transportation in Boston and New England. Traditional inner Harbor ferry systems provided links across Boston Harbor and its many embayments as pieces in critical intermodal city and regional travel systems.

Current ferry operations include various combinations of year round and seasonal services, commuter transit and recreational functions. For purposes of this plan, ferry functions with transit components were divided into several categories which reflect current operating patterns:

- **Year Round Commuter to Work Transit Services:**
 - Inner Harbor Transit routes such as Long Wharf to Pier 4 Navy Yard shuttle, and the Rowes to Logan Airport Shuttle.
 - Outer Harbor Transit routes such as Hingham to Rowes, and the Quincy Fore River to Airport and Long Wharf commuter routes.
- **Seasonal Excursion Transit Services:**
 - Inner Harbor shuttles such as the Water Taxi and Cultural Loop services.
 - Outer Harbor excursion routes including the Harbor Islands Park service and the World Trade to Provincetown service.

Existing transit and excursion services are shown in Figure 5-1. With few exceptions, the majority of the existing transit and excursion routes have origins or destinations at docks in the downtown core zone. The existing routes are served by multiple private operators who utilize a wide variety of vessel sizes and performance characteristics in the existing ferry fleet.

Ridership projections for transit ferries during the next ten years are surprisingly significant, indicating that potential growth of all existing and new services could triple current annual levels for commuter and excursion transit ferries combined.

5.2.3 Terminal Facility Conditions, Location Needs, and Design Guidelines

Potential new transit and excursion services are shown in Figure 5-2. New year-round transit services are planned for the inner Harbor, as well as the north and south shore to downtown, in addition to expansion of existing services. Seasonal recreational transit services are planned including restoration and expansion of the Cultural Loop, modified and expanded Harbor Islands Park routes, seasonal connections to the north and south shore, and increased service to Cape Cod, including Provincetown.

Site Selection Criteria. Terminal location selection is based on a combination of factors including primary market demand regarding trip origin and destination site requirements, as well as ferry facility configuration needs. The site selection criteria were based on a combination of previous route and market demand studies, an evaluation of current route performance and expansion needs, and projection of new waterfront growth and development demands. These criteria were used for screening and selecting sites as well as for designating roles and phased implementation.

- All terminals should, to the degree feasible, accommodate multiple ferry functions to provide intermodal transfer opportunities.
- All terminals will need to be fully accessible in accordance with current Massachusetts Architectural Access Board guidelines, consistent with the Americans with Disabilities Act requirements, and meet other applicable Harborwide guidelines and regulatory standards such as Chapter 91.
- Public landings and water taxi/Cultural Loop docks should be included and maintained at most primary and secondary terminals, where appropriate as navigation conditions, watersheet area and dock management permits.
- Waterside support facilities should include vessel layover berthing, day to day servicing, and maintenance and repair resources within the inner Harbor convenient to terminal facility sites.
- Landside support facilities should include ticketing, waiting, information and restrooms.
- Landside intermodal linkages should be provided wherever practical including all modes: pedestrian, bicycle, bus, taxi drop-offs, MBTA subway and commuter rail. Parking requirements may vary with the specific sites and are not generally required for the inner Harbor.

Terminal Facility Design Guidelines. Because terminal facilities have been developed by different entities over different time periods, there is little or no consistency from one location to another. The purpose of the design guidelines is to describe the range of conditions at existing terminal locations, identify needs for facility improvement, and quantify capacity and expansion needs based on the ridership and route changes identified in the plan. The terminal facility design objectives help define which terminals are intended to be included and covered by the design guidelines:

For each selected existing or new terminal site, there needs to be a future use program or functional vision with priority activities identified which best match site conditions. Each terminal site will be assigned a terminal facility activity designation:

- Primary or Hub Site
- Secondary
- Cultural Loop/Water Taxi/Public Landing
- Layover Berthing
- Service and Maintenance

BOSTON HARBOR PASSENGER WATER TRANSPORTATION PLAN INVENTORY

KEY

- ▲ Primary Sites - Existing
- △ Primary Sites - Potential
- Secondary Sites - Existing
- Secondary Sites - Potential
- ★ Service Sites - Existing
- ☆ Service Sites - Potential
- Inner Harbor Routes - Existing
- Inner Harbor Routes - Potential
- Outer Harbor Routes - Existing
- Outer Harbor Routes - Potential
- Excursion Routes - Existing
- Excursion Routes - Potential
- Cultural Loop

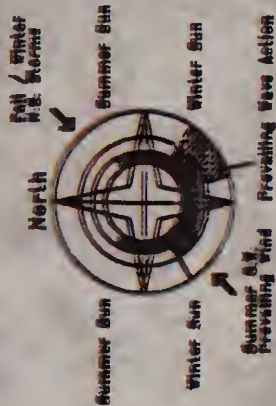
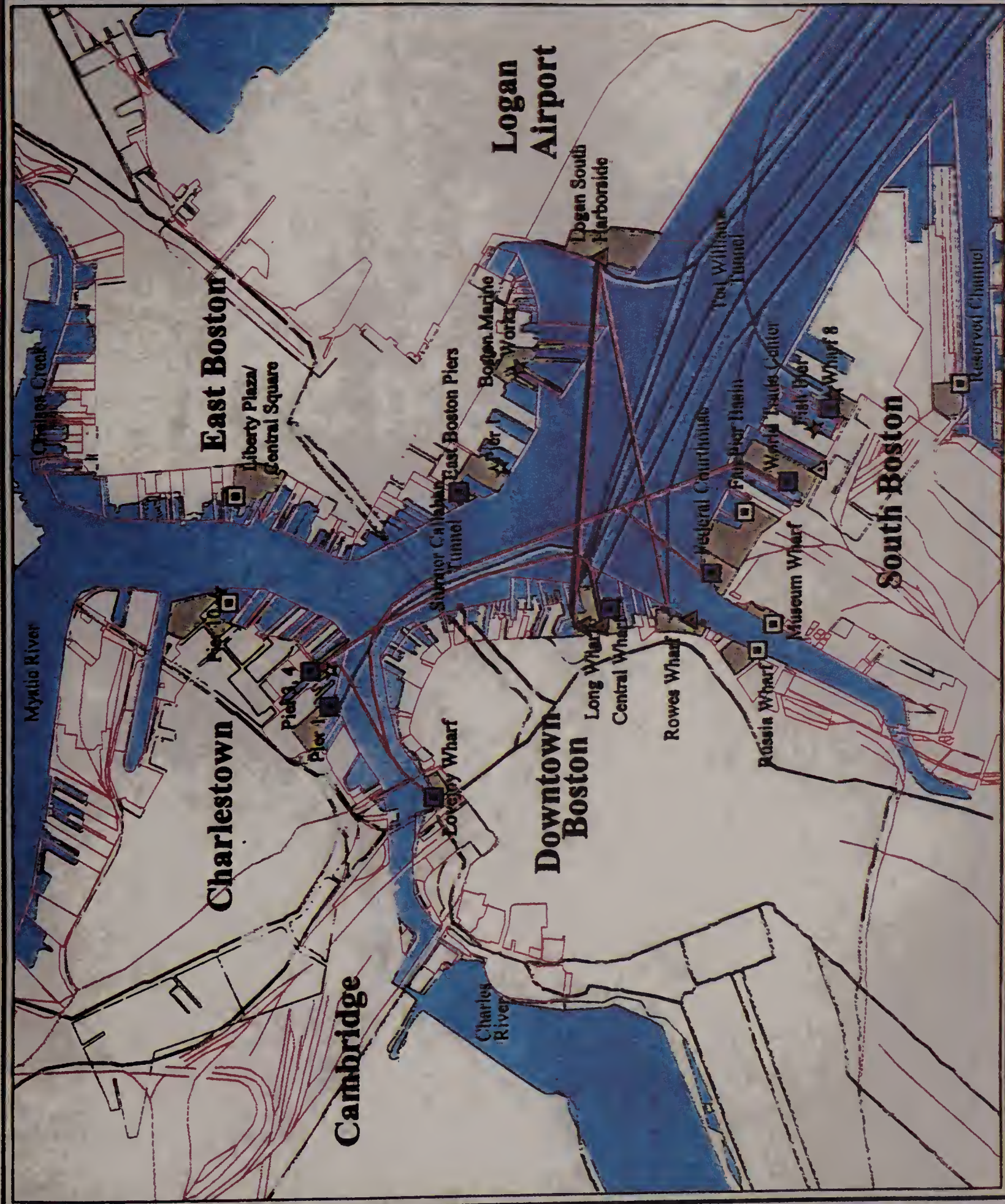


Figure 5-1
Transit and Excursion Services
Existing

1000' 2000' 4000'

TAMS

December, 1984



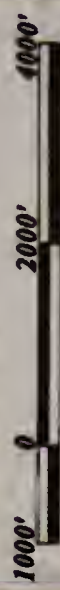
BOSTON HARBOR PASSENGER WATER TRANSPORTATION PLAN INVENTORY

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- Outer Harbor Routes - Existing
- Outer Harbor Routes - Potential
- Excursion Routes - Existing
- Excursion Routes - Potential
- Cultural Loop

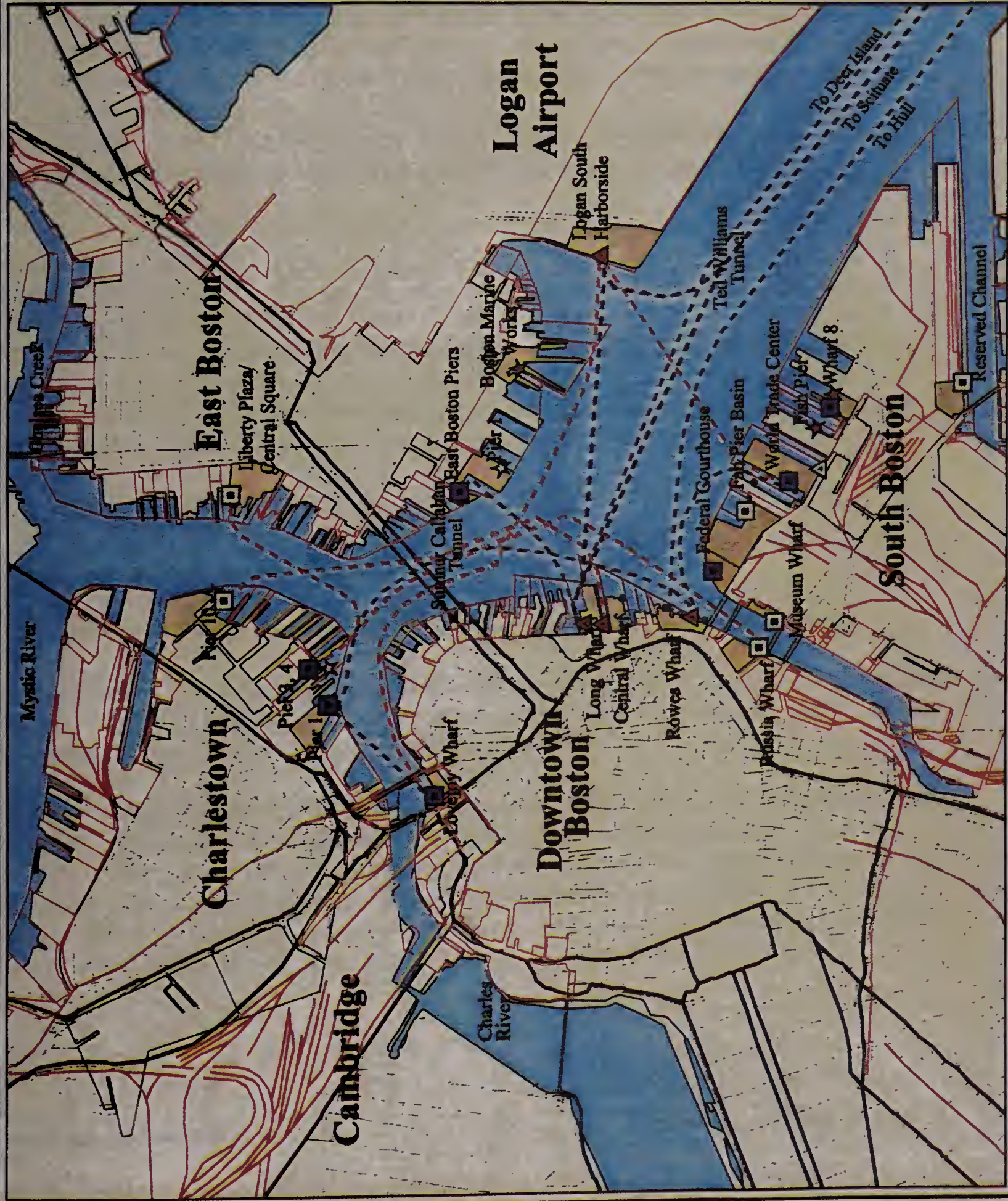
Figure 5-2

Transit and Excursion Services
Potential Routes



TAMS

December, 1998



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Specific ferry route functions were used to determine the terminal facility program needs for each terminal site:

- Transit Ferry Services which provide point to point, scheduled, year round, peak hour plus services, including inner Harbor (currently known as “shuttles”) and outer Harbor (currently known as “commuter” or “airport express”). Freeboard heights: 3'-6" to 7'-6".
- Excursion Transit Services which provide point to point, scheduled, seasonal services including inner Harbor, outer Harbor (including Harbor islands) and Massachusetts Bay (including north shore, south shore, Cape Cod and points beyond). Freeboard heights: 3'-6" to 7' - 6". These guidelines would also apply to non-transit excursion or larger charter vessels, such as Harbor tours, whale watch, dinner cruise, etc.
- Water Taxi and Cultural Loop Services which provide scheduled and on call, year round and seasonal, point to point inner Harbor links. Freeboard heights: 2 feet to 3 feet.

Selected Terminal Sites for the Concept Plan. The recommended terminal sites were selected through a process of evaluating alternative site options within each of the four inner Harbor waterfront districts: Downtown Boston, South Boston, East Boston and Charlestown. A map of the existing and potential terminal sites is shown in Figure 5-3; a summary of proposed terminal sites is contained in Table 5.1. The active passenger loading sites were divided into three categories based on their relative importance to each district and the volume of services either currently accommodated or projected:

- Primary or District Hub Sites
- Secondary Sites
- Layover Berthing and Servicing

5.2.4 Proposed Water Transportation Districts and Terminal Concept Plans

The major focus of the plan was to develop a pattern of terminal locations for the four ferry districts and facility design guidelines for individual terminal locations. Concept phasing plans were prepared for specific terminal facility locations.

Downtown Waterfront District. The greatest demand for expansion of ferry services, and corresponding need for increased public berthing space and expanded terminal facilities is along the downtown waterfront, particularly around the central business district and visitor attractions. An estimated 95% of annual Boston Harbor ferry passengers use the terminals in the downtown area, with over 90% using the core terminals from Long to Rowes Wharf. Concept plans were prepared for the following terminals:

Table 5.1: Summary of Proposed Terminal Sites:

Primary Sites:	Secondary Sites:	Layover Berthing and Servicing Sites
Downtown: - Long Wharf /Central Wharf # Long North Long South Long/Central Shuttle Central Wharf - Rowes/400 Atlantic Ave # South Boston: - World Trade Center # West Marine Terminal East Marine Terminal* East Boston: - Logan South Charlestown: - Pier 4/Navy Yard	- North Station/Lovejoy Wharf - South Station/Russia Wharf* - Museum Wharf - Federal Courthouse - Fan Pier Basin - Wharf 8 # - Black Falcon/Reserve Channel - Lewis Mall - Liberty Plaza/Central Square* - Pier 1/Pier 2 Constitution - Pier 10 Navy Yard*	 - Fish Pier - South Boston - Wharf 8 - South Boston # - World Trade Center # - Massport Shipyard/Boston Marine Works# - Pier 1/ East Boston - Pier 10/11 - Navy Yard* - Pier 3 - Navy Yard*

* Denotes new terminal facility; all others are expansions of existing terminals or layover sites.

Denotes terminal with multiple dock facilities

All primary and secondary terminals should include a public landing wherever appropriate with several specific exceptions: Long/Central MBTA Shuttle and Federal Courthouse.

BOSTON HARBOR PASSENGER WATER TRANSPORTATION PLAN INVENTORY

KEY

- ▲ Primary Sites - Existing
- △ Primary Sites - Potential
- Secondary Sites - Existing
- Secondary Sites - Potential
- ★ Service Sites - Existing
- ☆ Service Sites - Potential

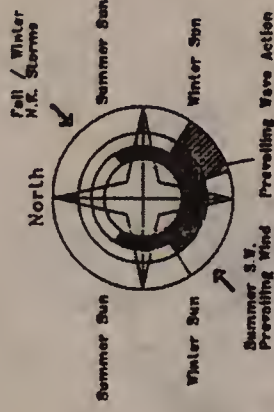


Figure 5-3
Terminal Locations
Existing and Potential



TAMS

December, 1996

- Long Wharf and Central Wharf
- Rowes Wharf/400 Atlantic Avenue
- Lovejoy Wharf/North Station
- Russia Wharf/Boston Edison site

South Boston Waterfront District. With the opening of the Boston Convention and Exhibition Center, along with new commercial, residential and port uses, South Boston is the area likely to see the greatest growth of new services and ridership volume outside the downtown core. The Public Realm Plan identified the key ferry terminal locations for the South Boston Waterfront District which are described in more detail below.

World Trade Center. Ferry terminal expansion is proposed for both sides of the World Trade Center along the Northern Avenue frontage, and this location should serve as the primary ferry hub for the South Boston Waterfront. Specific sites would include:

- World Trade Center Marine Terminal West (expanded existing)
- World Trade Center Marine Terminal East (new)

The World Trade Center area is currently the most active and diversified location along the South Boston Waterfront. The expanded Marine Terminal would serve as the primary terminal in the district. With the proposed reconfiguration of the Viaduct as a key pedestrian link, the terminal will be best situated to serve the new convention center and tie into the Silver Line. The terminal would use both sides of Commonwealth Pier and accommodate a full range of linked services, including inner Harbor shuttle, seasonal excursion, water taxi and Cultural Loop, charter and eventually commuter service. By locating the ferry terminals along Northern Avenue, as well as the inboard end of the pier, they would combine better visual exposure and access for pedestrians.

Museum Wharf. The Children's Museum is a suitable site for a seasonal water taxi, Cultural Loop and public landing facility, expanding the existing dock. Further use of the site for scheduled water transit services is limited by the relatively long walking distance to South Station for potential shuttle connections and the height restrictions of the Moakley Bridge for larger excursion vessels.

Federal Courthouse. The existing terminal has been made handicapped accessible and should continue to be location for dockage of historic and educational vessels and a stop on the North Station/Lovejoy Wharf water shuttle service.

Fan Pier Cove. A new terminal should be developed within the Fan Pier Cove as the surrounding site is developed and sufficient demand is created for transit or excursion services. The terminal will need an adequate turning basin for Harbor shuttle and excursion vessel access. The protected basin and terminal can serve as a new gateway and activity center and activity generator, and could have the character of a Rowes

Wharf depending on the adjacent building development, Harborwalk and ground-level uses that evolve.

Wharf 8/Fish Pier Basin. The basin between Wharf 8 and the Boston Fish Pier is the widest along the Harbor front, and offers many opportunities for water transportation facilities and services. Expanding terminal and service facilities at the following sites is proposed:

- Fish Pier East fuel and ice service docks;
- Wharf 8 terminal; and
- Wharf 8 layover berthing and provisioning.

An expanded excursion and shuttle terminal site could be developed at Wharf 8 adjacent to Northern Avenue. The terminal would continue to serve A.C. Cruise Lines as well as provide new shuttle docking for nearby commercial uses such as Jimmy's Harborside and other activities. As the former Pier 7 is replaced, ferry service and layover facilities could be added. The inboard end of the Fish Pier should retain its pier side fueling site and ice house.

Reserved Channel. The limited use commercial and charter vessel dock would be expanded at the inboard end of the Reserved Channel near the Summer Street bridge. This expanded multi-use dock should be maintained at or near the current site of Pier 1 in the Reserved Channel to serve new adjacent commercial and industrial uses and provide for charter ferry service and seasonal shuttle service for the Black Falcon Cruise Terminal, as well as periodic events such as the Tall Ships. Regularly scheduled shuttle services do not appear feasible from the site because of the excessive distance by water to other inner Harbor sites.

East Boston Waterfront District. The revitalization of East Boston will depend on improved public transportation including integral ferry connections to key waterfront locations with anticipated new residential, commercial and recreational development. Concept plans were prepared for:

- Logan Terminal
- Lewis Mall
- Liberty Plaza/Central Square - Mid-term

Charlestown Waterfront District. Improved and expanded terminal facilities are needed to meet growing demands for the short and enjoyable trip to and from the Navy Yard, and the Charlestown neighborhoods. Concept plans were prepared for:

- Pier 4/Navy Yard
- Pier 1/Pier 2/Constitution
- Pier 3
- Pier 10

5.2.5 Implementation Strategy and Funding Options

The following projects are listed in order of importance in meeting the growth needs of the expanding ferry operations in Boston Harbor. The highest priority projects are the primary or hub sites which serve each of the four inner Harbor districts.

High Priority:

Downtown Hub Terminal: The highest priority includes those projects that are in the central waterfront from Long Wharf to Rowes Wharf. These components include expansion of docking capacity and access for all types of ferry uses in the primary downtown destination area. Specific projects would include Long North, Long/Central Shuttle, Long South, Central Wharf, and Rowes/400 Atlantic.

Logan Passenger Water Transportation Terminal/ East Boston Hub Expansion: Access improvements and dock capacity expansion are a high priority for Massport and the increasing variety of operators serving Logan Airport.

World Trade Center/ South Boston Hub Terminal Expansion: Expansion of dock capacity and higher visibility terminals for year round service are a priority in providing multimodal transit options as the various South Boston Waterfront projects develop including the convention center, World Trade Center expansion, hotels and other development on Northern Avenue.

Pier 3 and 4 /Charlestown Navy Yard: Expansion of the increasingly busy Pier 4 terminal combined with a new service and layover site at Pier 3 are important for the Harbor-related neighborhoods as well as for seasonal visitors to the many historic attractions in Charlestown.

Second Priority:

Russia Wharf/Boston Edison: Construction of the long-awaited ferry terminal which will provide the connection to South Station and the Fort Point Channel is an important priority for the Downtown district.

Lovejoy Wharf/North Station: While already in operation, Lovejoy Wharf needs a permanent location with expanded capacity as well as landside access improvements prior to the completion of the north section of the Central Artery.

South Boston Secondary Sites: Fan Pier, Museum Wharf, Wharf 8, Pier 4 and Reserved Channel all need to be phased in as surrounding development creates new demand for ferry services. Excursion facilities will become increasingly important in South Boston as the convention center is completed.

East Boston Secondary Sites: A new terminal at Liberty Plaza and the landside enhancement of Lewis Mall are both important for future shuttle and excursion connections to and from East Boston.

Pier 1-Pier 2/Constitution: The major visitor dock needs added capacity and improved access in Charlestown to accommodate increasing volumes of seasonal and year-round visitors.

Layover Berthing and Service Facilities: Such support facilities are needed as downtown volume grows and the traditional dockside layover is no longer feasible.

Third Priority:

Pier 10/Yards' End: A third Navy Yard terminal will be needed as the Yards' End area is built out over time. Excursion operators will provide seasonal connections from downtown terminals. At present there is insufficient demand to support scheduled year-round ferry transit services or seasonal shuttle connections.

Funding Options. Preliminary cost estimates for the various terminal sites indicate the capital costs for fully accessible facilities can range from less than \$100,000 for a small expansion or retrofit to multi-million dollar new hub terminals, depending on the size and complexity of the project. The individual terminal projects were assessed in terms of potential public and private funding sources as shown in Table 5.2. Those terminals with funds that are committed are marked with an asterisk*.

5.2.6 Action Plan for Infrastructure Investments

A phased action plan is recommended for the design and construction of all proposed inner Harbor terminal facilities. Several of the high priority projects, such as the Downtown Hub and World Trade Center Terminals, are to be implemented over two or more of the action phases. The proposed action plan is described in three phases, each of which includes appropriate levels of planning, funding, and implementation: short term actions 1999-2003; mid-term actions 2004-2008; and long-term actions 2008 and beyond. As the phased action plan is highly detailed, it is not being reproduced here but can be found in the Water Transportation Plan.

Facilitating Ferry System Growth: Levels of City Involvement. As new terminal projects are initiated, the city can play a variety of roles in facilitating development from planning to funding coordination to active project management and ownership.

Table 5.2: Project Phasing and Funding Sources

<u>Terminal</u>	<u>Potential Funding Source(s)</u>
Short Term - (1999-2003)	
- Long North/T Wharf Phase I	TBB/TEA 21
- Long Wharf North/TWharf II	TBB/TEA 21
- Long South Phase I*	Private - BHC
- Long South Phase II	Private - BHC
- Long /Central MBTA Shuttle Phase I	TBB/TEA21
- Long /Central MBTA Shuttle Phase II	TBB/TEA 21
- Central South	TBB
- Rows/400 Atlantic Phase I	TBB/TEA21
- Rows Wharf/400Atlantic Phase II	TBB/TEA21
- Russia Wharf	CA/T
- Lovejoy Wharf*	CA/T
- World Trade Center Phase I	Massport/WTC - Chap.91
- Wharf 8 Phase I*	Private – BankBoston Pavilion
- Logan Terminal*	Massport
- Lewis Mall Landside Chap.91	TBB/TEA21, Clippership/Pier 1 -
- Pier 4/Navy Yard	TBB/TEA21
- Pier 3/Navy Yard	TBB/TEA21
Mid-term (2004-2008)	
- Long Wharf North/T Wharf III	TBB/TEA 21
- Central/India Phase I	TBB/TEA 21
- Central/India Phase II	TBB/TEA 21
- World Trade Center Phase II	Massport/WTC/Chap.91
- Lewis Mall/Clippership/Pier 1	Clippership+Pier 1/Chap.91
- East Boston service and layover	Pier 1/Private
- Museum Wharf	Children's Museum
- Fan Pier	Private - Hyatt/Fan Pier - Chap.91
- Pier 1/2 Charlestown	NPS
- Pier 4/NavyYard expansion	City
- Liberty Plaza/Central Square	Private - Liberty Plaza/Shaws/Chap91
- Federal Courthouse Expansion	GSA
- Pier 10/Navy Yard	Developer/Chap91

* Represents projects which had funding secured at the time of the report.

Level 1: City and BRA take an active lead role to initiate priority terminal projects through city property management, and direct terminal development and ownership.

Level 2: City and BRA take a partnership or coordination role with other public agencies such as the MBTA or DEP, with private sector partners such as a ferry or marina operator, and/or with a private institution. Primarily for properties with some form of city ownership, such as the old Northern Avenue Bridge.

Level 3: Regulatory review lead by BRA in terms of expediting specific required review and approval procedures for projects under BRA jurisdiction including projects such as the Fan Pier or Clippership Wharf. Coordination with state regulatory entities also required.

Level 4: Design review role for projects initiated by other public or private entities, but which have specific interfaces with the Harborwalk, public parks, or other city-owned properties.

Institutional Coordination. Various levels of interagency review and coordination with the private sector are recommended to keep projects moving smoothly through design and implementation:

- Continue annual or semi-annual passenger ferry forums including coordination and participation by the BRA, Massport, the MBTA, and the National Park Service, the Seaport Advisory Council, and Massachusetts Passenger Vessel Operators.
- Establish City interagency cooperation on dock management, watersheet management, and service upkeep with BRA or BTDA as lead.
- Coordinate with all state agencies involved with ferry services and facilities. Continuation of interagency meetings on a regular schedule with sessions focused on intermodal transportation and the evolving role of ferries. EOTC should act as the lead.
- For specific primary or secondary terminal areas where a public/private partnership is involved, establish coordinating entities modeled after the Operations Board at Rowes Wharf.

Watersheet Management Plan - Part II. It is recommended that the next critical phase of a watersheet management program be initiated with input from a group of stakeholders regarding the scope of work and design criteria. The work should build on the initial products prepared by the Urban Harbors Institute.

Ferry Operations and Ridership Database. Expansion and consolidation of existing data collection efforts by Massport, the MBTA and private operators to accurately record annual ridership and survey information, for purposes of improving services and building

awareness of the increasing importance of ferry services to meet the needs of commuters and of the growing visitor economy of the Harbor area. It is recommended that the City, which has the broadest interest in all transit and non-transit ferries, take the lead in coordinating the database.

Comprehensive Ferry Information System. Many creative efforts to jointly market and inform the public about all transit and excursion ferry services have been initiated during the past several years, such as the signage programs initiated by the BRA in conjunction with Harborwalk and coordinating with the CA/T Project, joint advertising and T-pass programs by the MBTA, and innovative marketing and franchising of airport intermodal ferry services by Massport, all of which have contributed to increased awareness and ferry use. There are opportunities for the City to take the lead in expanding these marketing efforts over the coming years to create a more cohesive, user-friendly, multi-faceted ferry network that places the Boston ferries on a par with the top international passenger water transportation systems.

6.0 PLANNING CONTEXT FOR THE SOUTH BOSTON WATERFRONT

The City's waterfront neighborhoods and industrial port areas have recently or are currently the focus of a number of planning efforts that will impact the South Boston Waterfront. These planning efforts, which are summarized below, are being conducted by several public and private entities. This Municipal Harbor Plan must be coordinated with each of these planning initiatives.

6.1 BOSTON MARINE INDUSTRIAL PARK MASTER PLAN

An important component of the planning for the South Boston waterfront is the protection and enhancement of Boston's Marine Industrial Park (MIP) for maritime industrial and industrial activity. In furtherance of this goal, the BRA has developed a Master Plan that establishes a framework for future development within the MIP and includes a specific process for review of future projects under the Massachusetts Environmental Policy Review Act (MEPA) and Chapter 91, while also providing a flexible framework to attract new and existing industries that can provide attractive job opportunities for Boston residents.

The BRA filed the Marine Industrial Park Master Plan/Final Environmental Impact Report (Master Plan) with the MEPA unit of the Executive Office of Environmental Affairs (EOEA) in December 1999. The Secretary of Environmental Affairs issued the Certificate on the Master Plan in March 2000, stating that it adequately and properly complied with MEPA. The Master Plan EIR represents the first step toward the approval of the MIP as a "Marine Industrial Park" under the Chapter 91 regulations at 310 CMR 9.02. Under these provisions, a Marine Industrial Park may be designated for special flexibility in licensing if a Master Plan is developed and approved under MEPA and accepted by the Department of Environmental Protection (DEP). The intent is to comply with the goals of the Chapter 91 program through this formal designation and achieve the benefits of the Master Plan framework for both regulators and project proponents seeking more streamlined approvals.

6.1.1 Procedural History

In July 1996, the BRA made an initial Master Plan filing with the MEPA Unit of EOEA and the Secretary issued a Certificate requiring the preparation of an "Interim Document" or Master Plan Update prior to filing a Final EIR on the Project. The BRA submitted the Master Plan Update in July 1998 which responded to the comments received on the Initial Master Plan and the Secretary issued a Certificate requiring the preparation of a Final Master Plan that resolved the remaining issues identified in the Certificate.

In February 1999, in response to the proposed relocation of the BankBoston Pavilion on an interim basis to Wharf 8, DEP issued a Determination of Applicability (DOA) under the Waterways Regulations. The DOA specified certain requirements, including that Wharf 8

will remain zoned as a Marine Economy Reserve District for at least ten years; that a list of alternatives sites for the BankBoston Pavilion be included in the final Master Plan and Chapter 91 license application; and that the final Master Plan be filed by December 31, 1999. The DOA will remain in effect until such time as a Chapter 91 License is issued in accordance with the Master Chapter 91 Written Determination for the MIP to be issued to the BRA/EDIC following completion of its Master Plan.

6.1.2 Consistency with Local Planning

The Master Plan is consistent with local planning efforts such as the Harborpark Plan, the Port of Boston Economic Development Plan and the Public Realm Plan. Because the MIP is located in a Designated Port Area and consists of filled and flowed tidelands, state regulatory review of proposed projects is required under the Chapter 91 and Coastal Zone Management programs. The BRA has met extensively with the relevant state agency staff to develop a Master Plan consistent with local and state land use goals.

6.1.3 Project Description

The MIP, shown in Figure 6-1, is a 191-acre industrial park located in South Boston and owned by the BRA/EDIC. The MIP is bounded by Boston Harbor on the northeast, the Reserved Channel on the south, Summer Street on the southwest and Commonwealth Flats on the west. The neighboring uses include the Boston Edison plant and Massport's Conley Terminal across the Reserved Channel, various water-dependent activities, manufacturing, and warehousing with some commercial and office uses.

In 1977, the City of Boston, acting through the Economic Development and Industrial Corporation (EDIC) secured ownership of the 167-acre South Boston Naval Annex from the U.S. Department of Defense. The MIP was intended to create jobs and economic activity that would enhance the city's economy and provide employment for city residents. In 1983, the EDIC purchased another 24 acres, formerly part of the South Boston Army base. Since the initial purchase of the Naval Annex, the City has made over \$40 million in improvements to the infrastructure, which in turn has leveraged more than \$150 million in private investments. The BRA/EDIC has continued actively to promote the use of waterside parcels within the industrial park for water-dependent use and the development of interior parcels for compatible industrial use.

6.1.4 Master Plan Update and Final Master Plan

The Master Plan Update and the Final Master Plan address the majority of the issues expressed by the agencies and the community on the Initial Master Plan and outlines the local and state regulatory framework to implement the Master Plan. A significant majority of oral comments received at a public hearing in South Boston and written comments received by MEPA on the Initial Master Plan were strongly in favor of continued industrial and maritime development at the Park. To address these and other concerns expressed by



Prepared By: Fort Point Associates, Inc.

Marine Industrial Park Locus Plan

Figure 6-1



the public, the Master Plan Update as amplified by the final Master Plan contain the following commitments:

- City of Boston will retain ownership of MIP
- No hotel use will be permitted in MIP
- Office uses will be restricted to industrial office (except for parcels A and Q-1 where office uses will be allowed)
- The DPA boundary will not be changed
- Wharf 8 will retain its existing zoning as Maritime Economy Reserve District (MER).

6.1.5 Proposed Zoning

Land uses at the MIP are subject to the provisions of the City of Boston Zoning Code. Under the Zoning Code, the MIP currently has two zoning designations: Maritime Economy Reserve (MER) and Industrial (I-2). The MER zone is very restrictive and allows only maritime industrial uses. The I-2 zoning, however, is the most flexible of any zoning category in the city and allows the full range of commercial, office, hotel and industrial uses.

The Master Plan proposes new zoning districts for the MIP and defines allowable uses within each district. The intent is to achieve the objective of a minimum of two-thirds (67%) of the land area be devoted to water-dependent industrial uses; the balance of the MIP would be in other uses, primarily industrial. A maximum of 5% of the MIP would be used for commercial uses incidental to and supportive of the water-dependent industrial uses. No residential or hotel facilities will be allowed.

The Master Plan proposes the following zoning changes:

- New Waterfront Manufacturing District
- New Waterfront Commercial District
- Slight increase in the MER District
- Elimination of the I-2 District

Proposed zoning designations, described below, are shown in Figure 6-2.

The **Waterfront Manufacturing District** encompasses most of the area previously zoned I-2 (except for two small areas added to the MER District and two parcels added to the Waterfront Commercial District). This district promotes a continuation of the existing range of industrial uses while eliminating office and hotel uses that could be incompatible with maritime industrial uses. This district would allow a mixture of maritime industrial uses, including certain industrial supporting office uses.

The **Waterfront Commercial District** encompasses parcels A and Q-1 which are outside of the DPA at the Summer Street gateway to the MIP. These areas do not have direct access to the Harbor and are not capable of supporting ship to shore transfers. The parcel locations relate more to the Summer Street corridor than to the Harbor. This district is intended to provide new development opportunities for office and commercial uses in a limited area of the MIP in order to generate revenues for re-investment into the Park.

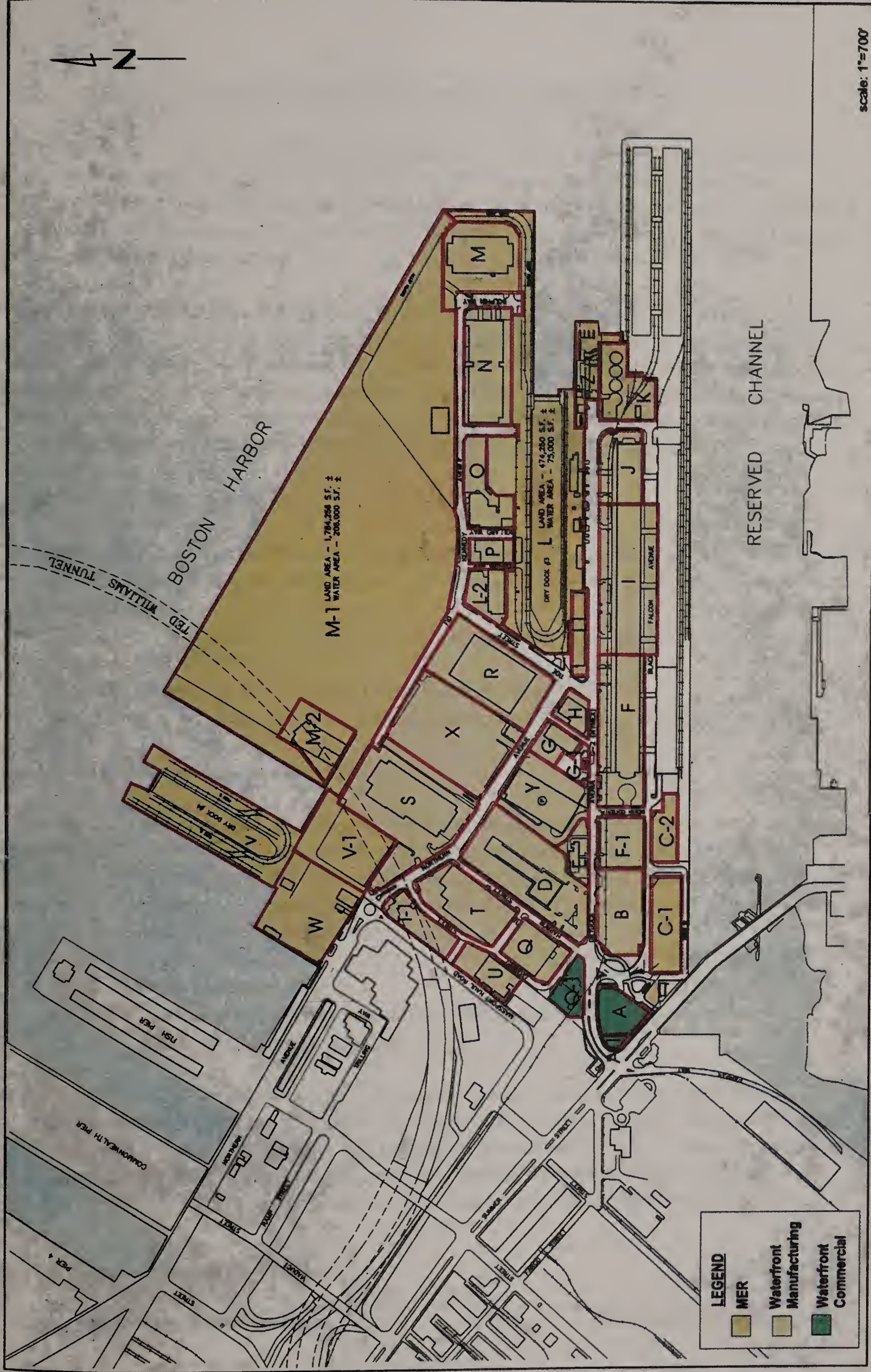
The **MER District** includes all those portions of the MIP located along the shoreline. This district restricts uses to water-dependent industrial uses which involve activities that require access to the water, those that transport, store or process waterborne goods, or those that entail seafood processing. The MER zone was established to protect significant maritime properties throughout the Harbor and is more restrictive than the current chapter 91 regulations. The MER district is being slightly modified by the inclusion of Parcel L-1 adjacent to Drydock No. 3 and minor boundary changes in the vicinity of parcels C-1 and C-2 to make the parcelization and zoning boundaries consistent.

6.1.6 Chapter 91 Program

The Chapter 91 licensing program is the primary vehicle state agencies will use to implement the land use goals of the Master Plan. The BRA has worked with DEP to develop a procedure whereby a park-wide Chapter 91 license application would be submitted to DEP by the BRA and DEP would subsequently issue a Written Determination and Master Chapter 91 license for the entire park. The Written Determination will set forth the procedures for the approval of various kinds of activities within the MIP boundaries. A Master Chapter 91 License will then be issued establishing guidelines for uses and procedures for the approval of projects within the MIP. Future projects proposed in the MIP would be reviewed by DEP to determine consistency with the Master Plan. The Master License will require that a minimum of 67% of the MIP is devoted to water-dependent industrial use. The balance of the MIP would be in other uses, primarily industrial. A maximum of 5% of the MIP would be used for commercial uses incidental to and supportive of the water-dependent industrial uses. No residential or hotel facilities will be allowed.

6.1.7 Approval of Final Master Plan

The MIP Master Chapter 91 License Application was filed with DEP in November 1999 and the final Master Plan was filed with the MEPA office in December 1999. The Certificate on the Master Plan was issued in March 2000. A Master Chapter 91 License is anticipated that would establish guidelines for uses and procedures for the approval of projects within the MIP. The BRA will subsequently prepare the proposed zoning amendments for consideration by the BRA Board and Boston Zoning Commission.



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Marine Industrial Park Proposed Zoning

Figure 6-2

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6.2 PORT OF BOSTON ECONOMIC DEVELOPMENT PLAN

Well before the beginning of the development of the Public Realm Plan for the South Boston Waterfront, the BRA, in a joint effort with Massport, studied the maritime industrial economy of Boston and the land use needs of maritime businesses. A good deal of this effort focused naturally on South Boston, the location of the major part of Boston's maritime industrial economy.

The objective of the Port of Boston Economic Development Plan (the Port Plan), completed in 1996, was to make the port more competitive in the global marketplace and benefit all who live, work and visit at Boston's Harborside. Since 1996, the two agencies have actively pursued the implementation of the Plan's recommendations. This summary focuses primarily on the recommendations as they effect South Boston. Please consult the Port Plan for more detailed information on Charlestown and East Boston.

The Port Plan's goals were to:

- Promote and encourage the development of the seaport economy.
- Maintain maritime jobs and preserve essential port properties for active maritime industrial uses.
- Provide the waterside and landside public infrastructure to support the future growth of the industrial seaport.
- Promote the port as a component of the Boston tourist trade.
- Redevelop appropriate portions of the port for a mixed Harbor-wide economy.

6.2.1 The South Boston Port Area

The Port of Boston is a 16-mile band of land and waterfront wrapped around the shipping channels of Chelsea Creek, the Mystic River, Boston Inner Harbor, and the Reserved Channel. While maritime industrial activity occurs throughout the Harbor, there are areas within the City of Boston today that represent the future of the port because they possess the key qualities for seaport development:

- deep water channels,
- landside access to highway and rail networks, and
- large, appropriately zoned land areas.

The South Boston port area, shown in Figure 6-3, was created over the past 150 years by dredging and landfilling the Commonwealth Flats. It was developed for large-scale uses that required a waterfront location and were typically served by rail. A network of at-grade rail lines served the piers and warehouses, while viaducts carried wagon (and later truck) traffic above rail lines, allowing both rail and street traffic to operate at the same time.

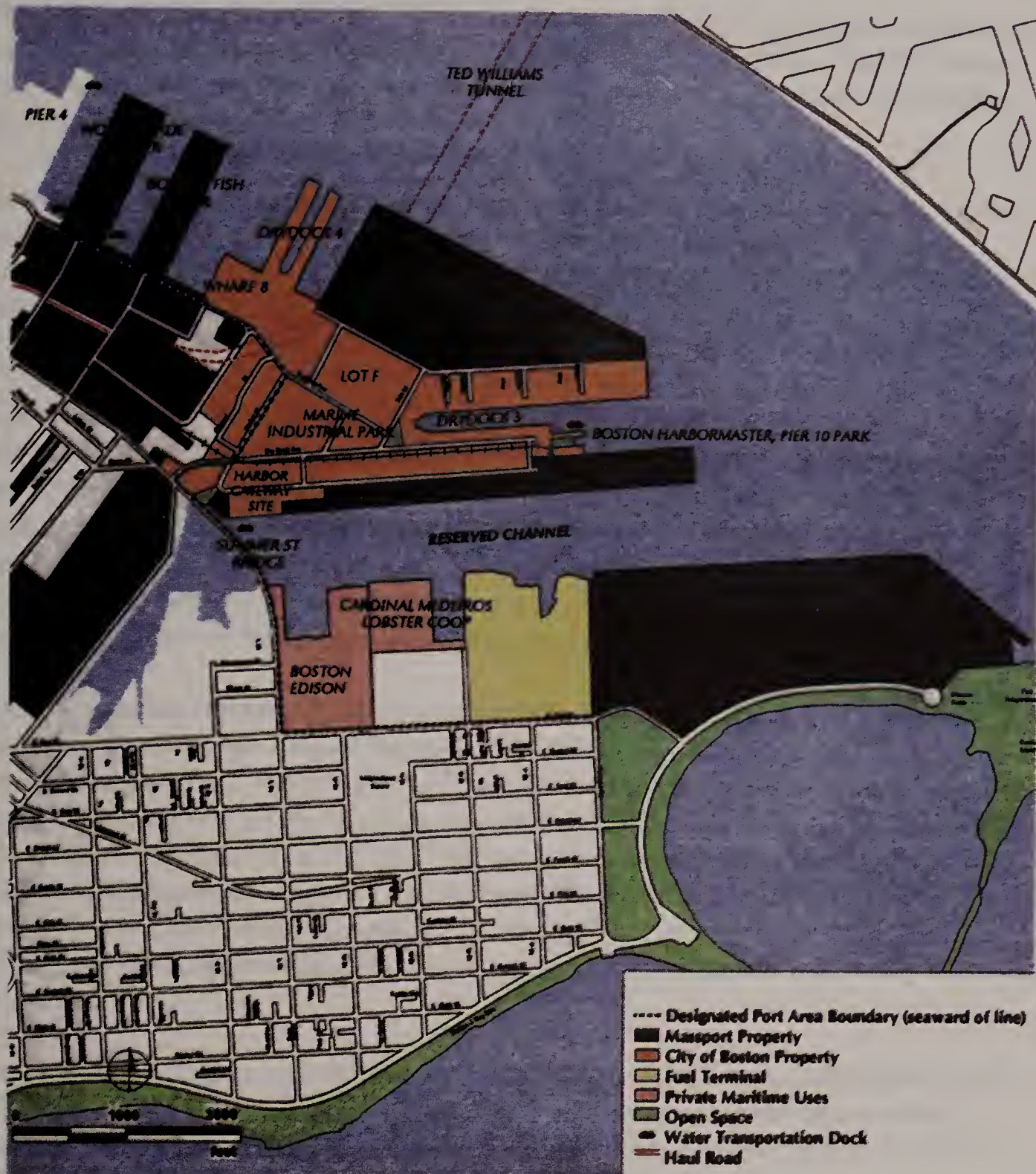
Approximately 40 percent of Boston's seafood businesses can be found along Northern Avenue together with many of the area's tourist-oriented facilities. The City of Boston has made major investments in the Marine Industrial Park to house a wide variety of tenants. The Marine Industrial Park, covering 191 acres, includes Drydocks No. 3 and 4 which are special assets to the Port of Boston. They are well-built, have direct access to the Main Ship Channel and are economically irreplaceable. The Marine Industrial Park also contains cement storage, the Boston Design Center, seafood processing firms, and warehousing.

On the Reserved Channel is the Black Falcon Cruise Terminal which has the capacity to berth four cruise ships at its approximately 3,000-foot wharf. The 101-acre Conley Terminal represents a major investment by Massport to expand public container facilities within the Port of Boston. It has four active ship berths served by four post-panamax cranes, which are among the largest on the U.S. east coast, giving Boston a competitive advantage in attracting the newer, larger ships. Buildings 117 and 118 are being redeveloped into the International Cargo Port, an intermodal cargo transfer facility. Many activities that support the port can be found in the Summer Street and West First Street industrial area, such as seafood companies, trucking companies, freight forwarders, warehousing and distribution companies, and light industrial activities.

Transportation Infrastructure. Major infrastructure improvements have already begun to transform this area's transportation access dramatically. The influence of these transportation projects on the maritime economy of South Boston cannot be underestimated. By 2003, the South Boston Waterfront will be fully connected to the interstate highway system. Truck routes serving the waterfront will be upgraded, producing shorter travel on local streets and greater trucking efficiency. These public infrastructure projects will provide sufficient transportation capacity to support redevelopment in the Fort Point/Courthouse area.

- The Central Artery/Tunnel Project, now under construction by the Massachusetts Highway Department, will have positive long-term impacts on the South Boston waterfront. The South Boston Haul Road -- a dedicated artery for commercial vehicles between Congress Street and Interstate 93 -- provides a direct route for trucks between the interstate highway system and the South Boston Waterfront.
- The Ted Williams Tunnel, an Interstate 90 connection beneath Boston Harbor, dramatically improves truck access between South Boston and East Boston/Logan Airport. In 2003, the Tunnel and the South Boston Waterfront will be connected to the interstate highway system via a link beneath Fort Point Channel.
- The new Northern Avenue Bridge and new Northern Avenue have been constructed to improve connections between downtown and the South Boston Waterfront. The Summer Street and Congress Street bridges over the Fort Point Channel and the Summer Street Bridge over the Reserved Channel will be rebuilt over the next several years to improve access.

SOUTH BOSTON PORT AREA



South Boston Port Area

Figure 6-3



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- The Massachusetts Bay Transportation Authority (MBTA) is currently constructing the South Boston Piers Transitway, a tunnel busway that will carry electric buses from South Station to the World Trade Center with a station accessible to the new Federal Courthouse.

Navigational Access. Sites with deep water berths are maritime economic resources that are impossible to replicate elsewhere. As a result of the Boston Harbor Navigation Improvement Project, the depth of the Main Ship Channel and Reserved Channel will be increased to 40 feet at Mean Low Water (MLW) and the depth at the Conley Terminal berths will be increased to 45 feet at MLW.

Zoning and Designated Port Areas. A large amount of waterfront area between Commonwealth Pier and Castle Island has been mapped by the Massachusetts Coastal Zone Management Program as a Designated Port Area (DPA), a classification that restricts use of these areas primarily to water-dependent industrial and supporting uses. In 1988, the City of Boston rezoned much of the waterfront from Commonwealth Pier to Castle Island as a Maritime Economy Reserve (MER) zone. Allowed uses in MER zones are similar to those in DPAs -- water-dependent industrial and supporting uses.

Significant Properties Owned by Massport and the City of Boston. The Marine Industrial Park, owned by the City of Boston's BRA/EDIC, is comprised of 191 acres, of which approximately 30 are under water and 161 acres are land. Massport has 47 acres of this area under long-term lease for the Massport Marine Terminal. BRA/EDIC and Massport capital investment in the Marine Industrial Park is over \$60 million, which has resulted in private investment of over \$160 million. These investments have helped the City to promote waterfront development and secure major leases for a range of maritime, industrial support, and commercial uses that have brought economic vitality and jobs to the Marine Industrial Park.

Major maritime properties owned by Massport include Conley Terminal, the Black Falcon Cruise Terminal, Buildings 117 and 118 (now under construction as the International Cargo Port), and the Boston Fish Pier. Other Massport properties that support the port include Commonwealth Pier, the 16-acre Fargo Street Terminal, and numerous industrial properties in the Commonwealth Flats.

For descriptions of the Charlestown and East Boston Port areas, please consult the Port of Boston Economic Development Plan.

6.2.2 Improving Port Infrastructure

Access to the port facilities by sea, rail and highway is essential to the success of the seaport. The backbone of the port, the commercial shipping trade, is entirely dependent on deep water ship channels, nearby rail service, and safe and efficient truck access, whether for intermodal cargoes, fuel oil, cruise ships, seafood distribution or bulk commodities.

The single most important source of funding for seaport infrastructure improvement projects is the Seaport Bond Bill which has provided funding many of significant seaport initiatives.

Boston Harbor Navigation Improvement Project. The Boston Harbor Navigation Improvement Project (BHNIP), currently underway, will result in the deepening of key portions of Boston Inner Harbor, its tributary channels, and berth areas, allowing a significantly larger (post-panamax) class of container ships to call in the port. With the completion of this project, Boston's channels will be deeper than those of New York, Philadelphia and Montreal, giving Boston competitive advantage in the container business. At completion of the dredging, Mean Low Water depths will be as follows:

Conley Terminal	45 feet
Main Ship Channel	40 feet
Reserved Channel	40 feet
Mystic River	40 feet
Chelsea Creek	38 feet

The Boston Harbor Navigation Improvement Project began in 1997 and is scheduled for completion by the end of 1999. It is a congressionally authorized project with Massport serving as the local sponsor.

Doublestack Rail. The value of the Port of Boston to transportation users is measured by its ability to link cargo origins and destinations. Much of the world's cargo is shipped in containers that are offloaded from ships and placed on either trucks, rail cars, or barges for transport and delivery. The standard for transporting containers on rail is now the doublestack method. Doublestack refers to the practice of stacking containers two-high on rail cars, a method that increases the efficiency of freight movements.

Boston is one of the only large metropolitan areas in the United States that is not served by doublestack rail. Massachusetts has substandard doublestack clearance from the western part of the state to Worcester and single stack clearance from Worcester to Boston. In order to achieve the clearances needed for doublestack service, bridges over rail lines need to be raised and rail beds lowered.

Doublestack would extend the Port of Boston's market reach into the U.S. midwest, enabling Boston's port to capture new cargo volume, and enhance service to New England. The increased volume of intermodal cargo available with doublestack rail will provide an incentive for steamship lines to continue to call in the Port of Boston. Through the Seaport Bond Bill, \$85 million has been allocated as part of a joint public/private effort with the railroads to raise bridge clearances on primary rail routes, including the Conrail line which spans from the New York State line to Beacon Park Yard in Allston, making doublestack rail service possible. Additional sources of funding are currently being sought.

6.2.3 Port of Boston Economic Development Strategy

The industrial port is a vital part of our regional economy and a key ingredient in our competitiveness. Efficient cargo shipment holds down the cost of doing business and the price of consumer goods. It allows local businesses to expand markets through export, and reduces the cost to local manufacturers of overseas shipment. Ocean cruising and waterfront tourism infuse dollars into the region. Seafood processing and distribution has grown so successfully that Boston is a national leader in processing seafood products sourced and sold globally. Ship repair and a host of smaller, independent marine businesses make Boston a full-service port.

The port is a source of good-paying, industrial jobs for local residents. Boston residents have a long tradition of participation in the seaport economy, particularly in fishing and seafood processing, cargo handling, ship repair, and marine services. These kinds of industries typically offer jobs with high wage scales and good benefits, and are important sources of employment, particularly to residents of the port neighborhoods of South Boston, Charlestown and East Boston.

Intermodal Cargo Transportation. One of the key recommendations of the Port Plan was the Marine Terminal Optimization Program, whereby Massport has consolidated all container operations at Conley Terminal in South Boston. Combined with the construction of doublestack rail access to Beacon Park Yard, harbor dredging, and truck access improvements, container consolidation will make the Port of Boston more attractive to the world's premier steamship lines.

The backbone of the seaport economy is the trade in commodities that move over land and sea. Most goods move in standardized containers, boxes built to international specifications which can be transported by ship, truck or rail car. The efficiency with which containers can be transported into and out of a region impacts the competitiveness of the region's businesses by influencing transportation costs, hence the cost of doing business and the price of consumer goods in the region.

Growth and Economic Impacts. The Port of Boston handles approximately 90,000 containers annually, making Boston the eighth largest container port on the east coast. Forecasts show that annual container volume in Boston could reach 200,000 by the year 2010. This higher volume would increase service options for New England importers and exporters while reducing the unit costs of transportation.

The greatest impact of higher container volume is the economies of scale generated in transportation cost and efficiency. This benefit influences consumer prices and business location decisions, attracting companies to the region's seamless transportation system, including doublestack rail.

Marine Terminal Optimization Program. In 1996, as the first step toward improved steamship line service, Massport developed a new system of cargo handling in the Port of

Boston. Prior to that time, each public terminal in the Harbor handled a variety of cargo types. Massport's Marine Terminal Optimization Program created a system of dedicated, single-use cargo terminals:

- *Containerized cargo* is now handled exclusively at Conley Terminal in South Boston.
- *Automobiles and dry bulk cargo* are now handled in Charlestown.

Consolidating container operations at Conley Terminal will generate economies of scale in cost and efficiency through greater volume. Conley Terminal, with its 100-plus acres of cargo marshalling area and ability to handle the longest, deepest, tallest, and widest container ships in the world, offers the ability to meet the port's container needs for the foreseeable future.

Conley Terminal is located just one mile from the future interchange connecting the South Boston port area with the extension of Interstate 90. This interchange will provide seamless access to the regional highway network and to doublestack rail service at Beacon Park Yard. Because Conley Terminal is seaward of the Harbor tunnels, it may be dredged as deep as necessary for handling future generations of container vessels. Today's ships require a depth of up to 45 feet of water when fully loaded.

Automobiles and Dry Bulk Cargo. Anticipating additional growth in automobile imports, Massport also developed Boston Autoport, a dedicated, state-of-the-art facility at Moran Terminal/Mystic Piers for the shipment, storage, and processing of automobiles. The facility will make Boston a load center for North American automobile imports and exports and provide a 150 percent increase in auto handling capacity over today's facilities. Dry bulk transshipment and storage has been consolidated at the Medford Street Terminal in Charlestown. Complete descriptions of these sectors can be found in the Port Plan.

Petroleum and Other Liquid Cargo. Half of all petroleum products transshipped through the Port of Boston are moved through the narrow Chelsea Creek shipping channel. Our region's fuel supply depends on safe navigation of Chelsea Creek. The Boston Harbor Navigation Improvement Project will dredge the Chelsea Creek to 38 feet to maintain deep draft ship access. The Chelsea Street Bridge presents a navigational hazard to tankers negotiating Chelsea Creek; the City of Boston is currently completing the design of a replacement bridge with greater horizontal and vertical clearances.

Cruise Industry. By 2005, Boston will see as many as four cruise ships in port at one time. To accommodate this growth, the Port Plan recommended the expansion of passenger facilities at the Black Falcon Cruise Terminal and the creation of an additional berth at the Massport Marine Terminal north jetty.

One of the brightest spots in today's port economy is the cruise industry. Cruise activity has increased dramatically in recent years, from 15 sailings in 1990 to 47 in 1994 and an

anticipated 100 sailings in 2000 serving 200,000 passengers. Boston possesses some of the most attractive port-selection criteria for cruise lines, such as:

- a large potential passenger base,
- suitable pre- and post-cruise activities,
- a positive tourism reputation,
- world-class hotels and restaurants, and
- frequent and expansive airlift.

The Port of Boston has one of the finest cruise terminals on the Atlantic Coast. Unlike terminals in Boston's competitor ports, Black Falcon Cruise Terminal is within one mile of downtown tourist attractions. Cruise activity is expected to double in Boston over the next ten years.

Massport is currently evaluating passenger modifications necessary to support the anticipated increase in cruise ship visits. This study focuses on capacity and passenger circulation enhancements at Black Falcon Cruise Terminal. As part of this study, Massport is evaluating the expansion of the terminal further into Building 119. (The terminal currently occupies only about one-third of Building 119). The recommendation to create an additional berth at the Massport north jetty will not be pursued, as the height of cruise ship vessels could present a potential problem for air traffic around Logan Airport.

Seafood Industry. To maintain Boston's preeminence as a world center for seafood processing and distribution, Massport and the City of Boston, in keeping with the Port Plan's recommendations, have developed a new Seafood District at the Marine Industrial Park. Up to 300,000 square feet of new seafood processing space will accommodate firms being displaced by construction projects, along with those requiring more modern facilities to meet upcoming federal regulations.

The first phase of the Seafood District, now complete, is located in the MIP and consists of the New Boston Seafood Center, a complex of two buildings totaling 64,000 square feet that houses four seafood businesses. The second phase is being developed on the Massport Marine Terminal site and will consist of approximately 65,000 square feet of space for 10 seafood tenants. Construction of the second phase began in Spring 2000.

Boston has long been a leading national processing and distribution center for seafood products. Approximately 1,900 people work in the seafood industry here, with about \$650 million worth of annual sales to regional, national and international markets. While there has been much publicity over the decline in New England groundfish landings, the Boston seafood processing and distribution industries continue to thrive by developing new worldwide sources of supply and by diversifying product offerings.

Boston's seafood firms have been able to maintain their competitive edge in part because of their efficient access to highways and the airport to distribute fresh and frozen products. A South Boston location is important to many firms wishing to be close to Logan Airport,

to the New England Fish Exchange on the Boston Fish Pier, to each other, and to their labor base. The new Ted Williams Tunnel and associated highway improvements linking the district to the airport and the regional highway network will greatly improve the ability of firms to reach their markets, but in the short term companies face displacement and disruption caused by the construction.

The amount harvested in New England's traditional groundfish fishery has declined dramatically from about 300 million pounds in 1984 to about 150 million pounds in 1992. Stocks are expected to rebuild over the next six to eight years. Boston's infrastructure of the Boston Fish Pier as the landing point for harvesters, the New England Fish Exchange as the wholesale trading market for the fish, and the traditional groundfish processing sector, must all be kept intact in order to capitalize on the eventual recovery of that fishery.

Several seafood processing and distribution firms were displaced by construction projects. In addition, significant capital investment in upgrading older facilities or relocation to new facilities has also been necessitated by new federal requirements. These new federal HACCP (Hazard Analysis of Critical Control Points) regulations will require the industry to invest in new equipment and facility improvements to maintain cool temperatures and washable surfaces in areas where fish are handled.

Ship Repair Industry. Demand for ship repair in the northeast has been in decline, but aggressive infrastructure improvements and marketing have begun to generate new interest in the port's ship repair facilities. The City of Boston is pursuing markets consisting of maintenance and repair of military ready-reserve ships, locally-based commercial vessels, and the large number of tugs, barges, and other support vessels that serve the port. Success in these markets may bring opportunities to expand into domestic vessel repair for the coastwise and Great Lakes fleets.

The Port Plan envisions Boston as a full-service industrial port. In order to offer a full-service industrial port, a range of basic ship repair and maintenance services must be available to cargo and passenger ships calling at Boston.

Shipyard jobs have special value in Boston because of local residents' long tradition of shipbuilding, dating back to the days of the whaling ships and coastal schooners. Ship repair is a source of industrial employment with compensation and training generally higher than many other jobs.

Direct employment in ship repair depends on successful bidding by shipyard managers for repair and maintenance contracts. By its nature, ship repair is not continuous, and given the fluctuations in employment, shipyard managers may have difficulty keeping adequate numbers of qualified craftsmen available when contracts are secured. It is important for the long-term viability of the industry to have sufficient ship repair work in the port to maintain an active pool of skilled labor.

Boston has several major facilities that are dedicated, by their unique design, to ship repair. The City of Boston's BRA/EDIC owns two drydocks located in the Marine Industrial Park.

- Drydock No. 3 is capable of handling some of the largest ships afloat, including the Queen Elizabeth II. Built in 1915, Drydock No. 3 has a 106,000-ton capacity, with dimensions of 1,176 feet long by 120 feet wide with a 44-foot depth. It has two 40-ton capacity cranes.
- Drydock No. 4 is capable of handling small to medium-sized vessels. Built in 1941, it has a 37,500-ton capacity. Its dimensions are 693 feet by 92 feet with a 35-foot depth. It has two 40-ton capacity cranes.

Both drydocks are of excellent military construction and could be improved by increased shoreside facilities and updated plant and equipment. In the long term, more cost effective, competitive operations could be achieved only if significant capital investments in both facilities were made. Since the completion of the Port Plan, active marketing efforts and infrastructure investment have yielded positive results in terms of the activation of these facilities.

With a grant of \$235,000, the BRA/EDIC installed a new generator at Drydock No. 3. The drydock facility has been leased to Boston Ship Repair. In the past two years, some seven ships have been repaired including the *U.S.S. Massachusetts*.

Drydock No. 4, together with the two flanking piers, has been leased to Modern Continental Construction, the construction contractor for the South Boston Transitway. Modern will construct three 240-foot tube sections for the Transitway in the drydock and then float them into place in the Fort Point Channel.

Marine Support Services. Port industries depend on local services that require small-scale shoreside facilities in a central Harbor location. The principal concentration of marine services on Boston Harbor is centered on Massport's East Boston facilities. A complete discussion of these firms and their land use needs will be included in the Municipal Harbor Plan for East Boston.

The Port Plan found that warehousing and distribution facilities in close proximity to the container terminal are critical to the future success of the Port of Boston. Market research done in 1996 indicated a demand for an additional 200,000 square feet of modern warehousing space for support services within one mile of Conley Terminal. The International Cargo Port, a redevelopment of Buildings 117 and 118, currently is under construction to fulfill this need. This facility is a modern, intermodal transfer facility for the transshipment of containerized cargo and has truck, ocean and rail access. Goods are off-loaded, processed, and re-loaded for distribution. The facility will have 185,000 square feet of warehouse space along with associated office space.

Public Access and Harbor-Based Tourism. While the Port Plan focuses on water-dependent and industrial uses, new opportunities exist to increase the public's access to and enjoyment of the waterfront. This is a long-standing City of Boston policy under the Harborpark Program and an important policy goal of Massport.

A number of initiatives were recommended in the Port Plan, such as the reactivation of the Cultural Loop, a scheduled water transit service, linking Boston's museums, historical parks and other points of cultural interest along the waterfront; and additional public access and viewing points to industrial port activities, among others. In support of public access, a new Harborwalk and Harbor overlook are being constructed at the International Cargo Port; Massport has erected Harborwalk signage at the World Trade Center and along Northern Avenue; and a new D Street park is planned as part of the redevelopment of Massport properties.

6.3 FORT POINT DOWNTOWN WATERFRONT MUNICIPAL HARBOR PLAN

Following completion of this Municipal Harbor Plan, the Municipal Harbor Plan Advisory Committee (MHPAC) and the BRA will turn their attention to the preparation of an Amendment to add the Fort Point Downtown to the City's existing Municipal Harbor Plan. The MHPAC already has begun to review many of the relevant issues for the Fort Point Downtown Amendment as they relate to the South Boston Waterfront and this Municipal Harbor Plan.

The Fort Point Downtown Amendment Area, shown in Figure 6-4, consists of seven (7) parcels of land immediately adjacent to the west side of Fort Point Channel with a total land area of approximately 23.48 acres. The Amendment Area is bounded to the west by the Financial District, to the north by the existing Downtown Waterfront Subdistrict, to the east by Fort Point Channel and the South Boston Waterfront District, and to the south by an area consisting largely of transportation infrastructure.

The boundary of the Amendment Area was chosen primarily because of the area's strong relationship both to the Downtown Waterfront to the north and the Financial District to the west. Although the elements of the Public Realm Plan that relate to Fort Point Channel and the rest of the South Boston Waterfront will both inform and provide context for this planning effort, the Fort Point Downtown, with its taller structures and primary commercial uses, is closely aligned with the Downtown Waterfront and the Financial District. The depression of the Central Artery will create a closer connection between the Financial District and Fort Point Channel and future development in the Amendment Area must enhance this connection, and draw people to Fort Point Channel and the South Boston Waterfront beyond.

From north to south, the Fort Point Downtown parcels and a summary of the major issues relating to each are discussed below.



**FIGURE 6 - 4. Fort Point
Downtown Waterfront
Municipal Harbor Plan Area**



Hook Lobster – The Hook Lobster parcel is less than one-half acre of land and pier, the majority of which (approximately two-thirds) is pile-supported structures over flowed tidelands. The current occupant of the existing one-story wood structure, James Hook Lobster Co., is a wholesale and retail distributor of fresh seafood. This site offers an intriguing development opportunity, but any redevelopment of this site likely will require extensive improvements to the seawall and repair and/or replacement of the site's dilapidated pilings. The site also will be impacted by the redevelopment or replacement of the adjacent old Northern Avenue Bridge. Completion of Harborwalk along the seaward edge of the parcel is a priority, and particular attention must be paid to Harborwalk connections to be made both north and south of this parcel. Given the site's small area and the expected cost of infrastructure improvements, substitutions for the height, setback, use and lot coverage/open space provisions of the Waterways Regulations may be proposed.

470 Atlantic Site - The parcel immediately to the south of the Hook Site contains a fourteen-story office building with a street address of 470 Atlantic Avenue (the "470 Atlantic Site"). The 470 Atlantic Site contains 55,496 square feet of land and pier. Approximately 50% of the site is located on piling. The building on this site covers the entire parcel and currently affords no public access to the waterfront. The CA/T project was slated to build a new pile-supported Harborwalk along the length of this site. This property was recently sold, however, and the new owners have proposed a redevelopment of the site that will restore full public waterfront access by completing a new Griffin's Wharf along the north side of the building and an interior Harborwalk that will be carved out of the building adjacent to the Channel. It does not appear that the redevelopment project, as proposed, will require any substitutions from the Waterways Regulations. Other issues to be addressed include developing strategies for activating the site's ground floor, Harborwalk and adjacent watersheet.

BECO. Site - The next parcel to the south is the former home of Boston Edison Company (BECO). The BECO. Site contains 100,775 square feet of vacant land, most of which is filled tidelands. Current CA/T Project plans will place a 240-foot tall vent structure for the depressed Central Artery on this site. Also, there is an existing agreement between the owner of the parcel, Boston Edison Company, and the Massachusetts Highway Department for construction of a 17-story mixed-use commercial building on the site with more than 300 parking spaces. The building is designed to surround the ventilation stacks, screening the vent structure from view. Boston Edison filed a DEIR/DPIR for the project on September 30, 1998. The structure will house either offices or a hotel, and will be approximately 230 feet high. The project also will include the creation of significant public amenities, including almost 50,000 square feet of waterfront and related open space on the site, a public landing area and interior and exterior accessways to the waterfront. The project as proposed complies with Chapter 91 in all respects, except for height of the building, for which a substitution will be proposed. The BECO. Site also is one possible location for the water transit terminal to be constructed by the CA/T Project. The City's Water Transportation Plan denotes Russia Wharf/Boston Edison as a secondary site, which should in the future serve both water shuttles and water taxis for pick up and drop off.

Other issues to be addressed include developing strategies for activating the ground floor and exterior waterfront areas; how the site can contribute to the activation of the Channel; and how the site can exploit the connection between the Russia Wharf/Boston Edison water transportation terminal and South Station.

Russia Wharf - Adjacent to the Boston Edison Site are the three historic Russia Wharf Buildings which are listed with the National Register of Historic Places. Each of the buildings is seven stories high. The majority of the site is filled tidelands. The CA/T project will complete Harborwalk along this portion of the Channel and Russia Wharf is another possible location for the CA/T Project water transit facility. The three buildings are currently used primarily for office space, with some retail and restaurant uses on the first floors the buildings. The MBTA is taking a portion of the site that is beneath the surface for construction related to the Transitway, which will prevent redevelopment of the site until at least 2002. Issues to be addressed for any future redevelopment of Russia Wharf include determining what uses and design elements will best activate the site's Harborwalk and ground floor; whether the site is suitable for additional height; what lot coverage and open space ratios are appropriate for the site; how the site can exploit the connection between the Russia Wharf/Boston Edison water transportation terminal and South Station; and how the site can contribute to the activation of the Channel.

Federal Reserve Building - The Federal Reserve building is a 600-foot high office tower located entirely on filled tidelands. The site contains 242,305 square feet of land area. The CA/T project will reconstruct the sidewalk along Dorchester Avenue adjacent to Fort Point Channel to meet the City's Harborwalk standards. The Federal Reserve is in the process of planning and re-landscaping their grounds, and developing a new museum that will focus on economic history that will be located on the ground floor. Important issues to be resolved will be coordinating the redesigned outdoor space with the Harborwalk adjacent to the site, and creating a draw between the Federal Reserve's new museum and the waterfront.

Stone & Webster Building - The Stone & Webster building is a 12-story, 154-foot high office building also located entirely on filled tidelands. The site contains 81,958 square feet of land area. The Stone and Webster Building recently was sold. In the course of the municipal harbor planning process, strategies will be developed for completing Harborwalk and activating the ground floor, as well as how these elements can contribute to the activation of Fort Point Channel. In addition, this site will have to be reviewed for potential substitutions that may be appropriate in the event the site is redeveloped.

Postal Annex - The Postal Annex contains several connecting buildings on 429,237 square feet of land, all of which is filled tidelands. The Postal Annex buildings are 96 feet high. The size of this parcel represents an extraordinary redevelopment opportunity. The Fort Point Downtown Amendment will need to address appropriate uses for the site, completion of Harborwalk and other forms of public access and open space, appropriate heights, a street and block plan, and urban design guidelines.

6.4 CENTRAL ARTERY/TUNNEL PROJECT MITIGATION COMMITMENTS

The Central Artery/Tunnel Project (CA/T Project) mitigation commitments include a number of improvements in and along the Fort Point Channel. These improvements include constructing Harborwalk at various locations along the Channel, a new water transportation facility in the Channel, and a new Cabot Cove Park, as well as constructing and/or reconstructing the Channel seawall at various locations. These improvements are discussed in greater detail below.

The CA/T Project will complete Harborwalk at the following locations on the Channel:

- Boston Edison site;
- Russia Wharf;
- at Dorchester Avenue between Congress and Summer Streets, adjacent to the Federal Reserve Building;
- along the southern portion of Basin D near the new Dorchester Avenue Bridge and the new railroad bridge;
- seaward of the Gillette property; and
- along the Boston Wharf property in the Fort Port Historic Subdistrict, and connecting to the interior Harborwalk at 253 Summer Street (temporary).

The CA/T Project originally was slated to complete Harborwalk at 470 Atlantic Avenue as well, but this property recently was sold. The new owner is seeking approvals to complete extensive renovations to the interior and exterior of the building. In connection with these renovations, the owner will complete Harborwalk along the Channel, which will be carved out of the interior of the building and which will connect to a new Griffin's Wharf also to be completed by the owner along the north side of the site.

The CA/T Project also will construct the new Cabot Cove Park near the new Dorchester Avenue Bridge, in addition to a number of landscaping commitments.

The CA/T Project mitigation commitments include the requirement to build a new water transportation facility in the Fort Point Channel. This facility originally was sited at Russia Wharf, but was relocated to the Boston Edison site due to issues related to construction of the Silver Line/Transitway Tunnel and relocation of the *M.V. Chelsea*. Design of the terminal has not been finalized, and the location may change again. The CA/T Project is exploring other options for locating the facility in Basin B of the Channel, including constructing a temporary facility at Museum Wharf on the east side of the Channel and changing the site of the facility permanently to the Boston Edison site.

Finally, the CA/T Project will construct and reconstruct the seawall at various locations throughout the Fort Port Channel.

6.5 CENTRAL ARTERY/TUNNEL PROJECT AIR RIGHTS RESTORATION

As a result of the CA/T Project, approximately 30 acres of surface land in the downtown stretching from Bulfinch Triangle to Chinatown will become available for reuse. The City, Commonwealth and community interests first established the framework of land uses and development guidelines for the Central Artery Project air rights with the publication in 1991 of the Boston 2000 Plan and its companion zoning, BZC Article 49 – Central Artery Special District. The Boston 2000 Plan was incorporated into the CA/T Project through its MEPA certificate. Of the Central Artery parcels, those from Christopher Columbus Park south to Chinatown run parallel to Boston's Waterfront, although none of the parcels is located directly on the waterfront.

The Boston 2000 Plan strongly recommends that development of the air rights parcels be approached as an integrated and interactive whole, balancing the integrity of the corridor and its unique district characteristics. The Boston 2000 Plan also outlines basic land use and urban design guidelines for restoration and redevelopment of the air rights parcels. The Boston 2000 Plan proposed a mix of civic and open space (75%) and commercial and housing (25%) uses for this critical urban corridor. Key elements of the Boston 2000 Plan are:

- A new park system and a series for public facilities in the Waterfront/Faneuil Hall area and the Financial District, including a conservatory and botanical garden.
- New neighborhood parks in both Chinatown and the North End.
- Restored historic connections across the corridor, including streets, pedestrian crossings and view corridors.
- Tree lined boulevards from Causeway Street to Kneeland Street.
- Improved and expanded pedestrian environment.
- New housing including affordable housing in the North End and Chinatown.
- Economic development opportunities in the Bulfinch Triangle and the Chinatown/Leather District.
- A restored Bulfinch Triangle whose historic fabric was severed by the elevated Central Artery and the elevated MBTA Green Line.
- A new surface roadway system which balances traffic needs with those of the pedestrians.

The Boston 2000 Plan did not attempt to address matters related to the implementation of the plan, such as feasibility, financing, ownership and management. In 1996, Mayor Menino and then EOTC Secretary Kerasiotis convened the Boston 2000 Working Group. Chaired by Move Massachusetts 2000 and the Artery Business Committee, the Boston 2000 Working Group was charged to develop an implementation strategy for the Boston 2000 Plan, and to update the Boston 2000 Plan based on any changed conditions.

The Boston 2000 Working Group established the following three task forces to address these issues: development and finance; disposition and open space management; and land use and urban design. In January 1998, the Boston 2000 Working Group published a Progress Report that presented the findings, conclusions and recommendations of the group. The Progress Report also generally reaffirmed the basic principles of the land use and urban design vision of the Boston 2000 Plan.

The CA/T Project environmental documents require the Commonwealth to construct the parks called for in the Boston 2000 Plan. To that end, the Massachusetts Turnpike Authority, which owns the air-rights parcels, working with the City and community representatives, recently selected a design team to produce conceptual plans for the parks. These plans will be the basis for formal park designs and contract plans. The objective is to have park construction contracts ready for construction to begin when the Central Artery viaduct is demolished in 2005. The Massachusetts Turnpike Authority also will initiate solicitations for interest in the parcels that are to be developed under the Boston 2000 Plan.

6.6 EAST BOSTON MASTER PLAN

In April 2000, the City issued a new master plan for all of East Boston. The East Boston neighborhood, including the waterfront, is shown in Figure 3-3. The master plan is the product of several years of goal setting, the evaluation of various development scenarios, and a careful screening of alternatives for feasibility and implementation potential.

The East Boston Master Plan describes the future character of East Boston's waterfront and an ongoing role for its maritime related industries. It describes how to protect and enhance existing residential neighborhoods, what role the community's history will play, and what new economic development opportunities exist along the Harbor front and in the community's various commercial districts.

The East Boston Waterfront is divided into two separate focus areas for the purpose of the Master Plan. Each is described below with recommendations in terms of the six elements of the plan, as applicable: land use, open space and public environment, historic preservation, transportation, development guidance, and regulations.

6.6.1 The East Boston Inner Harbor Waterfront

The East Boston Inner Harbor Waterfront focus area encompasses the Jeffries Point/Massport waterfront, the Old East Boston waterfront, and the lower section of Chelsea Creek bordering Eagle Hill.

East Boston's waterfront is a critical area of focus for the master plan. The area offers great development potential, given its views of downtown Boston and Charlestown, strategic location for maritime activities, and its rich untold history. Existing and recently proposed development projects on the waterfront focus on the Harbor to create a competitive advantage. The master plan brings all these pieces together to form a cohesive vision for the waterfront. The community's desires for increased open space and cultural activities must be balanced with the private sector market demand for waterfront residential use and the regional demand for port-related activities.

The master plan elements related to the waterfront illustrate ways of enlivening and integrating it into the community fabric in a meaningful way. It presents recommendations for a diversity of land use activities, pedestrian and vehicular access, and open space opportunities along East Boston's waterfront from the Massport Piers to the lower Chelsea Creek. Recommendations include regulatory and urban design guidelines intended to protect the public interest in and access to, these valuable waterfront resources.

Land Use: The Inner Harbor waterfront, which currently is underutilized, offers the best opportunities for new land uses and development that blend unique maritime, economic, recreational, and natural opportunities. The opportunities include:

- Expanding the mix of uses on the waterfront to include additional residential, retail/commercial and cultural uses coexisting with present marine industrial, residential and institutional uses.
- Increasing the quality of residential use on the waterfront by building new housing on Pier 1, Clippership Wharf, Boston East and other waterfront properties as become available for redevelopment, while improving Shore Plaza East and other residential areas adjacent to the waterfront.
- Promoting potential retail and commercial uses at new development sites which complement abutting commercial and retail uses in Maverick and Central Squares.
- Maintaining maritime use and maritime port services that would include preserving existing uses at the shipyard, along the Inner Harbor waterfront and along Lower Chelsea Creek. By maintaining waterside access for port services, the master plan encourages more active use of the water sheet, thus enlivening the waterfront as well as providing needed port service facilities for the Harbor economy.

- Promoting cultural/institutional uses that reflect the heritage of the community. It is proposed that a cultural foundation be formed and housed in a temporary facility as a first step toward the creation of a museum facility on the waterfront.

Open Space and Public Environment: The waterfront offers the best opportunity for creation of new parks and open space within East Boston. Recommendations focusing on the creation of a waterfront open space network include:

- Creating additional waterfront parks along the Inner Harbor waterfront. The expansion of Piers Park with the creation of additional waterfront parks at Piers 3 and 5 would create a major waterfront open space where the views of Boston Harbor are spectacular. Each park offers potential for active and passive recreation and would create a continuous landscaped public waterfront park along the Jeffries Point neighborhood.
- Creating open spaces along the lower section of Chelsea Creek. The Condor Street Urban Wild is being transferred to the City of Boston's Parks and Recreation Department, which plans to clean it up and create a passive recreation park with restored vegetation and waterfront access. An additional open space in the form of a pedestrian access corridor to the bulkhead line would be created on a portion of the vacant Hess Oil Parcel and connected to the urban wilds by a 1200 foot segment of Harborwalk along the Creek. The site's redevelopment will necessitate a major clean up and might be constrained by the Designated Port Area designation. The abandoned railroad right-of-way at the northern end of East Boston's Chelsea Creek shoreline may present an additional open space opportunity.
- Expanding the Harborwalk to connect the waterfront open space system and public environment. The existing East Boston Harborwalk, which runs from the Harborside Hyatt to Porzio Park, would be extended when new parks and new activities are developed on the waterfront. The Harborwalk would continue along Marginal Street's existing and new waterfront park system, threading its way around the Pier 1 and Clippership Wharf proposed developments, and connect to LoPresti Park. There are also opportunities to extend the Harborwalk from LoPresti Park to the Boston East site, the Liberty Plaza (where a small Harborwalk already exists), Barnes School, and Shore Plaza East. The route would then turn onto Condor Street along the Chelsea Creek, through the Hess Oil site and up to the proposed Urban Wild Park.
- Creating waterfront pocket parks and public access. In connection with future redevelopment at Pier 1, Clippership Wharf, Boston East, Hess Oil, and the Car Barn site, small pocket parks and public access right of ways would be an integral part of the site design.

- Upgrading of existing public waterfront open spaces. Public spaces such as Porzio Park, LoPresti Park, and the Umana Barnes School property would be enhanced to be part of a cohesive waterfront open space network.
- Facilitating of public access and use of waterfront. Areas along the waterfront where private activities already exist but where immediate waterfront space is unused, such as Liberty Plaza, Shore Plaza East, and Hodge Boiler Works, are opportunities where pedestrian links could occur along the Harborwalk.

Historic Resources and Heritage: East Boston was initially planned by its developers to contain a mix of homes, maritime and other industries, and recreational facilities. East Boston became an important waterfront industrial center, with shipyards specializing in the construction of clipper ships, after the first ship was launched in 1839. East Boston's wharves served as Boston's center for European grain exports as well as being the Boston terminal for the London-based Cunard line. Some remaining waterfront structures and features are reflective of this heritage. The Boston Landmarks Commission recently undertook an inventory on the Old East Boston waterfront and Lower Chelsea Creek waterfront, highlighting a number of significant structures. This existing industrial character of the waterfront is part of the quality of life and appeal of East Boston.

Building upon the findings of the Boston Landmarks Commission survey, the Master Plan recommendations include:

- The undertaking of interpretive improvements and projects designed to illustrate East Boston's rich history. Such improvements could range from historic markers and wayside exhibit panels mounted along the Harborwalk, to interpretive landscapes designed to be integrated into the waterfront park system, to a potential cultural waterfront facility such as a museum or interpretive center with community space and exhibits modeled after the BRA's North End Historic Pier Network Program.
- The establishment of historic districts to include the contiguous waterfront area where the density of historic features and waterfront integrity is high.
- The creation of historic waterfront guidelines that could not only protect significant structures but could also ensure the contextual respectfulness of new developments.

Transportation: Transportation recommendations in this area are centered around strengthening pedestrian and vehicular circulation along, to, and from the water in conjunction with development of key parcels such as Pier 1 and Clippership Wharf. Recommendations include:

- The designation of a continuous "Waterfront Way" with a signature streetscape treatment along existing streets and new sections created within and between the development parcels.

- Creation of a continuous and connected pedestrian system linking the Greenway to Harborwalk (including passage through the shipyard).
- Provision for additional landings for water transportation services.
- Adding new Maverick Station headhouses closer to the water as development is completed at Clippership Wharf.

Higher residential densities should be planned in the areas closest to the Blue Line station and water transportation landings; parking requirements should be tailored to allow for a lower ratio of spaces to dwelling units in areas closest to transit.

Detailed traffic impact studies need to be completed for each site as part of the City and State environmental approval processes, once development projects are better defined. But preliminary analysis of likely land uses and densities for the existing and new activities along the waterfront indicate that traffic can be accommodated without undue negative impacts on residential areas.

Development Guidance: This section describes key development site guidelines for the Massport Piers, Boston East, Liberty Plaza, Hess Oil, and overall waterfront development guidance. New developments in the on the waterfront generally draw inspiration from the Boston Harbor typology and environment, while creating new places integrated to the surrounding neighborhoods:

- Maintaining view corridors to the water along Marginal Street, Clippership Lane, Lewis Mall, Bremen and Orleans Streets, and the Greenway.
- Maximizing views by designating a Harborwalk to be barrier-free, limiting fences only for safety reasons, and creating structures and shelters which are transparent and screen-like.
- Developing unified and unique lighting and signage consistent with the Harborwalk and waterfront street frontage which celebrate East Boston's waterfront heritage.
- Creating building blocks compatible in scale and character with the waterfront and adjacent neighborhoods.
- Creating street access as an extension of the existing street pattern.
- Minimizing traffic impact by orienting driveways for parking in line with Havre or London Street, which should be improved to allow for increased vehicular use.

- Screening and landscaping undesirable uses (such as surface utilities, parking lots, and/or parking garages) with trees, shrubs, and other public spaces.
- Respecting setbacks at the edge of the water, which would include designing plazas or parks with street furniture and landscaping consistent with Harborwalk standards, taking advantage of the waterfront views.
- Providing municipal services when developing larger parcels. The developer should address additional city service needs such as fire, police, schools, etc.

Regulatory Framework: To a large extent, the recommendations for the East Boston Waterfront respect and conform to the existing city and state regulatory framework for tidelands and waterfront uses. New developments such as the Massport Piers Project and Clippership Wharf will have to comply with the state's Chapter 91 regulations and the City zoning regulations for tideland and waterfront districts. The major principles of these two regulatory programs are:

- Provision of public access to and along the waterfront through extension and enhancement of the Harborwalk and creation of new public open spaces.
- Requirement for proper public purpose of projects within tidelands including the conserving the capacity for water-dependent use through such measures as height and setback limits.
- Preservation of maritime industrial uses to a great extent within the Designated Port Areas.
- Continuation and promotion of port service activities along the Inner Harbor waterfront.
- Provision of water transportation facilities.

The master plan includes two waterfront recommendations that could require modification to a section of the Designated Port Areas:

- The Boston East site is partially located within the DPA at the north and south ends of the parcel. The Plan recommends housing development on this parcel, which would require removal of the DPA classification.
- The Hess Oil Site on Condor Street and Chelsea Creek is located within the Chelsea Creek Designated Port Area as well as the Maritime Economic Reserve (MER) Subdistrict under the City's Zoning Code. There is strong community sentiment toward using this parcel as open space. This use would require removal of the site from the Designated Port Area and a change of zoning designation.

6.6.2 The McClellan Highway-Upper Chelsea Creek Corridor

This focus area is dominated by industrial and commercial uses that rely on the McClellan Highway for immediate truck access and the associated potential opportunities for economic development.

New industrial or commercial development in this area would be large-scale and could provide employment opportunities for local residents. The lack of residential neighborhoods adjacent to this area of the waterfront makes industrial uses more reasonable. Furthermore, since nearly all of the East Boston parcels along the Chelsea Creek are Designated Port Areas under Massachusetts Coastal Zone Management Program and Waterways Regulations, residential and recreational uses, would be strictly prohibited.

Land Use: Current land uses within this corridor are mostly commercial with some industrial uses. These existing commercial and industrial activities are mostly oriented toward the airport or the port. As long as the airport remains, the demand for commercial and industrial uses will exist within the McClellan Highway corridor.

In addition, planned transportation improvements to McClellan Highway will guide the uses along the corridor to be reliant on the regional highway network such as large-scale commercial/industrial uses.

- Increase commercial/industrial uses to generate significant positive economic benefits for the community in the form of additional jobs and taxes.

Historic Resources and Heritage: The history of the Chelsea Creek has gone untold for years. This important waterway has witnessed battles of the American Revolution and the development of adjacent communities. Efforts to tell the history of the Chelsea Creek exist within the Eagle Hill section of the Creek, while the highway corridor section is currently limited due to its vehicular nature and lack of open space opportunities. The following recommendation offers the community a unique setting to illustrate the heritage of the Chelsea Creek.

- Create an interpretive kiosk atop Madonna Hill in an effort to use the unique geographical setting to illustrate the local history and nature.

Economic Development Guidance: Improvements of the McClellan Highway traffic and streetscape will create improved access to adjacent land and create opportunity for commercial and industrial redevelopment in the future. Care should be given to avoid large expanses of parking lots in front of buildings and creation of a “strip” environment. As much as possible new structures should be oriented toward the street and recreate a street front as redevelopment occurs. Along Chelsea Creek, a public right-of-way should be preserved and landscaped. The following recommendations will help guide development within the Chelsea Creek/McClellan Highway corridor:

- Attract airport and highway users.
- Retain maritime access and industrial use along Chelsea Creek.

Regulatory Framework: The Master Plan recommendations for the McClellan Highway-Upper Chelsea Creek Corridor are consistent with the local zoning.

The area of the Corridor between McClellan Highway and Chelsea Creek is zoned as Maritime Economy Reserve and Waterfront Manufacturing Subdistricts. This is compatible with the DPA designation at the state level. Both regulatory programs promote water-dependent industrial uses. To the extent that commercial or nonwater-dependent uses occur in this section, there could be a regulatory conflict. The City should address this potential issue when developing its Municipal Harbor Plan. One factor to be considered in such a plan is the percentage of total filled land within the DPA allocated to supportive commercial and nonwater-dependent uses.

6.7 BOSTON HARBOR ISLANDS NATIONAL PARK AREA

The Boston Harbor Islands National Park Area consists of 30 islands within Boston Harbor. The islands, shown in Figure 6-5, range in size from one to 214 acres and are composed of 1,600 acres over an area of 50 square miles. Some of the islands are bedrock outcrops, while many of the other islands are drumlins – glacier-formed, asymmetrical, elongated masses of till that have formed into smooth-sloped hills. The Boston Harbor Islands are part of the only drumlin field in the country that intersects a coastline.

6.7.1 General History of Boston Harbor Islands

The Boston Harbor Islands were inhabited by as far back as 8,000 years ago. Since that time, they have been cleared to support agriculture and development. The vegetation on the islands consists primarily of grasses and sumac, although some islands have aspen, pine, birch and white poplar trees. Boston Harbor and its islands provide shelter, food, and a habitat for fish, invertebrates, marine mammals, and birds. Many of the islands contain buildings and structures that reflect the long and changing history of the islands; these buildings are used for commercial fishing, agriculture, coastal defense, year-round and/or summer habitation, industry, public health, immigration and social welfare. The park also contains three national historic landmarks: Fort Warren from the Civil War era on George's Island; Boston Light, the oldest lighthouse site in the country, on Brewster Island; and Long Wharf, the longest continuously operating pier in the country, in downtown Boston. Twenty-one of the islands are designated within an archeological district on the National Register of Historic Places, due to the significant presence of Native American archeological evidence.



Figure 6-5 Boston Harbor Islands National Park Area - Preferred Alternative

Used with Permission of National Park Service

The Boston Harbor Islands became part of the National Park System in 1996. The National Park System does not own or manage the park. Congress established the Boston Harbor Islands Partnership to coordinate the activities of the Federal, State, and local authorities with the private sector in the development and implementation of a general management plan. The thirteen member partnership consists of the National Park Service, U.S. Coast Guard, Massachusetts Department of Environmental Management, Metropolitan District Commission, Massachusetts Water Resources Authority, Massachusetts Port Authority, City of Boston, Boston Redevelopment Authority, Thompson Island Outward Bound Education Center, The Trustees of Reservations, Island Alliance, and Boston Harbor Islands Advisory Council.

6.7.2 Planning Objectives for the Boston Harbor Islands

The purpose of the National Park Area is: 1) to preserve and protect a drumlin island system, along with associated natural, cultural and historic resources, within Boston Harbor; 2) to enhance public understanding and appreciation of the island system; 3) to provide public access for education, enjoyment and scientific research. The planning process has been focused on and shaped around the following goals and policies: resource protection; research and information; visitor access, use, and enjoyment; education and interpretation; management and operations; and external cooperation. These goals are expressed in the General Management Plan issued for public review in June 2000. The General Management Plan establishes policy guidelines to guide planning for the next 15 to 20 years. It proposes unifying the park into one entity that is managed by various agencies and organizations.

The Boston Harbor Islands Planning Committee, responsible for developing the General Management Plan for the Partnership, identified three alternative management concepts. Alternative A emphasized the preservation of resources. Alternative B focused on the provision of activities for visitors. Alternative C emphasized creating a high level of visitor activity on the large, previously developed islands, while protecting resources and leaving the more isolated islands in a more natural state. The alternatives contained many similar characteristics, but the Committee and Partnership ultimately endorsed Alternative C, which is detailed below and referred to as the Preferred Alternative in the General Management Plan.

The General Management Plan focuses on concentrating a high level of visitor activity on the larger, previously developed islands while emphasizing the protection and preservation of existing island resources, particularly on the more remote and natural islands. The plan identifies three primary hub islands for both passenger ferry and visitor services: George's, Spectacle and Peddock's Islands. Additional hubs may be developed at Long and Deer Islands as visitor and water transportation demand expands. Hub facilities, concentrated near the pier, will include various visitor attractions (visitor contact stations, visitor programming and education, restaurant/food concessions, boat rentals, and venues for small events), while still emphasizing resource protection throughout the park. Negative impacts on natural resources due to an increase in visitors would be mitigated. Water

transportation to and from the park will be operated by private boat operators under contract to and monitored by the Partnership.

With regard to the more remote islands, the plan advocates the preservation of their resources by leaving them in a more natural state and providing few visitor amenities. Natural, critical, sensitive and cultural resources will be protected and preserved under a researched resource management program. Sixteen areas of special uses are expected to undergo little or no change in infrastructure through the general management plan. These areas are located on Deer and Nut islands, which house wastewater facilities; Long and Moon islands, home to social service and public safety facilities; and Thompson Island, which has an educational campus.

According to the plan, each of the islands that is open to the public will have the necessary staff to maintain park-wide standards of resource protection, interpretation, maintenance and administration. All infrastructure development should be sustainable, support park goals, use renewable resources, and be guided by a "green" philosophy. The plan also identifies potential changes in use: handicapped-accessible piers, visitor contact stations and visitor centers, utilities in certain areas, a Native American cultural center, an environmental education center, lodgings and campsites, administrative facilities, maintenance facilities, staff housing, adaptive reuse of historic structures, removal of some deteriorated structures, rehabilitation of some landscapes, boat moorings and rental facilities for water sports.

Total annual cost of operations is estimated at eight million dollars. Funds for park operations would come from all partners, excluding the Boston Harbor Islands Advisory Council, and from private sector funds raised by the Island Alliance, as well as from federal dollars to be provided in a one-to-three ratio of federal to nonfederal dollars. It is also anticipated that park-related services, user-fees, and income from commercial operations will provide additional revenue.

In terms of next steps, the Boston Harbor Islands Partnership Planning Committee, through the planning team, will consider public comment in order to refine and prepare a Final General Management Plan And Environmental Impact Statement. Upon endorsement of the plan, the Partnership will submit the plan to the Governor of Massachusetts and the National Park Service for review and approval. As the General Management Plan process is proceeding, the planning team is developing a Strategic Plan to implement the General Management Plan, identify program, infrastructure and construction priorities, and budget for the next five years. The Strategic Plan includes such components as monitoring of natural resources, construction of docks and repair of seawalls.

7.0 OPEN SPACE AND PUBLIC SPACE BASELINE REQUIREMENTS AND GUIDELINES

The South Boston Waterfront is expected to accomplish much as it is built out over the next several decades. It must provide the public with meaningful access to the waterfront, become a part of our economy, preserve and enhance our working port, enhance the South Boston community and become a neighborhood in its own right. The Waterways Regulations establish numerical requirements for four basic areas: use, height, setback or water-dependent use zone and lot coverage. But the numerical requirements of the Waterways Regulations alone cannot ensure that the South Boston Waterfront develops into a lively new mixed-use neighborhood. There are many other factors that are important to this equation beyond these numerical provisions.

Over the course of several weeks, the Municipal Harbor Plan Advisory Committee discussed the concepts of elements every property owner should be required to include as part of their development projects. “Offsets” were those components that, while important, seemed “above and beyond” the baseline, and which were thus appropriate to offset the negative impacts of substitutions. Many things were proposed as offsets. In the course of discussions, however, it became clear that many of the proposed offsets were very important – important enough to be required of every property owner. This chapter on open space and public space baseline requirements and guidelines reflects this decision.

Much of what we collectively wish to achieve is not directly related to the adoption of a Municipal Harbor Plan. However, through this Plan, we have developed general requirements with respect to each of the regulatory use and dimensional requirements to provide further guidance on issues related to height, open space, setback and use. In addition, this Municipal Harbor Plan also establishes design standards as articulated in the Public Realm Plan. These requirements are applicable throughout the South Boston Waterfront, regardless of whether a property owner is seeking to take advantage of substitute provisions, and are not to be considered offsets for the impacts of substitute provisions. These requirements will be applied by the BRA through their review of projects under Article 80 and by the Department of Environmental Protection (DEP) in issuing Chapter 91 licenses.

Many of these requirements place demands on property owners in excess of what Chapter 91 requires and, for that reason, are what is termed “amplifications” of the Waterways Regulations. They “amplify” the provisions of the Waterways Regulations by being more restrictive or by establishing additional requirements which also promote state tidelands policy objectives. For example, the Waterways Regulations require projects to include a waterfront pedestrian access network that is at least ten feet wide. The Municipal Harbor Plan requires property owners to include Harborwalk in their projects, which, under the City’s Harborwalk standards, must be at least 12 feet wide, and, given the large size of many of the development parcels in this area, will likely be much wider.

Another important consideration is that the entire MHP Area is comprised of Commonwealth tidelands. The Waterways Regulations establish a heightened standard for nonwater-dependent use projects located on Commonwealth tidelands, and require such projects to promote public use and enjoyment of Commonwealth tidelands to a degree that is fully commensurate with the proprietary rights of the Commonwealth therein. Many of the baseline requirements and guidelines contained in this chapter are in excess of even the requirements for Commonwealth tidelands, reflecting the City's commitment to the development of the South Boston Waterfront as a special destination that can be enjoyed by people from all walks of life.

7.1 OPEN SPACE AND PUBLIC ACCESS PLAN

In order to enable the BRA to review adequately a project and ensure that open space and other public spaces serve the public's interest in access to and enjoyment of the waterfront, any project subject to Article 80 Small Project or Large Project Review will be required to submit to the BRA an Open Space and Public Access Plan. The Open Space and Public Access Plan should include plans, drawings, specifications, descriptions of open space and exterior and interior public spaces and uses, and descriptions of proposed management measures and access-related rules and regulations, if any, sufficient to permit the BRA to determine the compliance of the project with this Chapter 7.0 and interim or final zoning adopted for the area, and to make a Section 18 Recommendation.

7.2 DETERMINATION OF PROPER PUBLIC PURPOSE

Section 18 of Chapter 91 requires that the planning board of a municipality in which a project requiring a Chapter 91 license is located submit a written recommendation stating whether the planning board believes the Project would serve a proper public purpose and would not be detrimental to the public's rights in tidelands (Section 18 Recommendation). A Section 18 Recommendation for a project located in the South Boston Waterfront area subject to this Municipal Harbor Plan will be made by the Boston Redevelopment Authority acting in its capacity as the City of Boston's planning board. The BRA will base its determination on the extent to which the project reasonably and appropriately preserves and enhances the public's rights in tidelands including, without limitation, the public's:

- visual access to the water, whether such project is for a water-dependent or nonwater-dependent use on private or commonwealth tidelands;
- rights to fishing, fowling, and navigation and the natural derivatives thereof, if such project is for a water-dependent use or nonwater-dependent use on private or commonwealth tidelands;
- physical access to and along the water's edge for recreation, commerce, and other lawful purposes, and interest in public recreational opportunities at the water's edge

and open space for public use and enjoyment, if such project is for a water-dependent use or nonwater-dependent use on private or commonwealth tidelands;

- interest in the preservation of the historic character of the project's site;
- interest in industrial and commercial waterborne transportation of goods and persons;
- interest in repair and rehabilitation of dilapidated piers that blight the district and limit public access; and
- interest in safe and convenient navigation in Boston Harbor.

Such determination also shall be based on:

- the project's compliance with the baseline requirements set forth in this Chapter 7 to the Municipal Harbor Plan;
- the extent to which the project reasonably and appropriately applies the guidelines set forth in this Chapter 7 of the Municipal Harbor Plan; and
- the project's conformity to the baseline requirements of the Waterway's Regulations or any substitute provisions and corresponding offsets adopted by this Municipal Harbor Plan.

7.3 WATER-DEPENDENT USE ZONE – 310 CMR 9.51(3)(c)

To ensure that throughout the South Boston Waterfront the water-dependent use zone is developed in a manner that will support and provide for a variety of water-dependent uses, this Municipal Harbor Plan establishes a series of general standards and principles to govern the design and development of this important resource:

- Water Transit Requirements
- Structures Located Within the Water-Dependent Use Zone
- Harborwalk

Water Transit Requirements. Because increasing public water transportation opportunities is a priority, it is not enough that a site's water-dependent use zone merely accommodate water transit. It is equally important that these areas be designed in such a manner that they actually encourage the use of water transportation through basic amenities. For example, facilities that support water transit, such as information and ticket booths and waiting areas must be conveniently located to serve users. Also, public water transportation docks should be located as close to land as possible to minimize the amount of time required to make intermodal connections. When we increase the convenience of

water transit, we broaden its appeal and begin to make it part of people's everyday lives. More specific information regarding the design and location of water transit facilities is contained in Section 5.2, the summary of the City's Water Transportation Plan, and Section 7.3 regarding Standards and Guidelines for the Watersheet.

Structures Located Within the Water-Dependent Use Zone. The purpose of the water-dependent use zone is to maintain enough land mass immediately adjacent to the watersheet to support and foster water-dependent uses and public access. Because, in some instances, structures located within the water-dependent use zone can assist with the accomplishment of these goals, the Waterways Regulations permit structures devoted to water-dependent use to be located within a water-dependent use zone. Small structures designed to shelter the pedestrians from wind or sun or while they wait for water transit, or which provide small watercraft or fishing rentals, sell ferry tickets or snacks, will support and foster water-dependent uses and public access. Not all of these uses are appropriate at every site. Also, depending on the site, it is possible that some or all of these uses could be accommodated more effectively on the ground floor of a site's larger development. It is also possible that small, free-standing structures located close to the water may, in some circumstances, be more desirable. Such structures may not block public access to the Harborwalk and, to the extent possible, be temporary in nature. The final determination with respect to individual sites is left to the Article 80 and Chapter 91 licensing processes.

Harborwalk. The centerpiece of the City's goal to provide public access to the waterfront is Harborwalk. From the initiation of Harborpark by the BRA in the early 1980's when the City first set the goal of creating a continuous 43-mile waterfront walkway along Boston Harbor, the City has been working diligently in partnership with private developers and property owners and Harbor advocates and improving our own waterfront sites to make this dream a reality. While the CA/T Project will be responsible for constructing much of Harborwalk along the Fort Point Channel, it is new development and redevelopment that will complete Harborwalk at the Channel and along the Inner Harbor.

Harborwalk is not just a public walkway. It includes seating, lighting, landscaping, public works of art, fishing piers, public landings, public restrooms, observation decks, and incorporates universal design standards throughout. Property owners and developers are required to complete Harborwalk along the seaward edge of their parcels in accordance with the Harborwalk standards developed by the BRA. Although the Waterways Regulations require a minimum walkway width of ten feet, the Harborwalk standards require a minimum walkway width of 12 feet (10 feet clear). However, given the large size of most of the parcels in the South Boston Waterfront, much of the Harborwalk in this District will be a great deal wider. Harborwalk will be located within a site's setback or water-dependent use zone. The exact dimensions of Harborwalk as a component of the setback will be determined in the Article 80 review process. In addition, the Public Realm Plan establishes a series of planning principles for the Harborwalk in this District that should be taken into account when property owners are planning their sites:

- extend Harborwalk into the South Boston Waterfront with a character that varies along its length in response to the distinct districts it passes through;
- from the downtown Harborwalk, continue the path along the water's edge over the alignment of the old Northern Avenue Bridge, along the edge of Fan Pier, around Fan Pier Cove and Pier 4, then split into a walkway at grade along Northern Avenue and around the pier buildings; and
- consider, where feasible, further extensions of the walk and/or point access into the Marine Industrial Park to Dry Dock No. 3 and the Reserved Channel, connecting across the Summer Street Bridge to South Boston's L Street Beach and Castle Island.

The Harborwalk should be located on existing land and piers. Only in limited circumstances may Harborwalk be located on new piles or cantilevered from the seawall. For example, the Central Artery is constructing a pile-supported Harborwalk along the Gillette property in the Fort Point Industrial District in order to avoid interference with Gillette's water-dependent industrial uses of its property. Project proponents will be encouraged to provide float systems adjacent to the seawall to accommodate vessel dockage and public access where appropriate. Such float systems, however, are in addition to, not in lieu of, the upland Harborwalk.

The City's Harborwalk signage program is another important component of the Harborwalk. The signage program is a graphic system developed to direct people to and along the Harborwalk and to nearby public amenities, such as a water transit station or public restrooms, to parks and open spaces, to cultural venues and historic exhibits – in essence to help pedestrians make the most of their waterfront experience. Property owners will be required to incorporate appropriate Harborwalk signage throughout their sites.

7.4 STANDARDS AND GUIDELINES FOR THE WATERSHEET

7.4.1 General Standards and Guidelines

The Commonwealth and the City share many of the policy goals regarding how the watersheet may be used and what may be constructed in the watersheet. These policies and the requirements that implement them can be found in various laws and regulations, including Chapter 91, the Waterways Regulations (310 CMR 9.00), the Municipal Harbor Plan Regulations (301 CMR 23.00), and in the City of Boston Zoning Code, in particular Article 27P, the South Boston Waterfront Interim Planning Overlay District.

The watersheet in the South Boston Waterfront should be used for water-dependent purposes, including public access, which attract the public and generate activity year-round. As described elsewhere, landside requirements, such as setbacks and Harborwalk, will encourage the public to access and use the water's edge. But it is also the goal of the

Municipal Harbor Plan to promote the public's use not only of the water's edge, but of the water itself. Uses that would privatize the water, such as office uses, should be prohibited in this watersheet. Similarly, with regard to residential uses, vessels in which the owner lives aboard are acceptable only if moored in a developed marina facility.

Development projects on the South Boston Waterfront should include facilities appropriate to each site that promote water-based public activity, such as ferries for commuters and excursion passengers, water shuttles and water taxis, public landings, fishing areas, docks for the charter or rental of vessels, and floating barges for public performances or for public access. A variety of recreational uses should also be accommodated (sailing, kayaking, pedal boats, rowing) provided these activities are available for patronage by the general public.

Recreational activities should be located in areas where they will not interfere with navigation or water transportation services and where water quality and environmental conditions are suitable. These activities should have associated landside support, such as a boat house or a structure with lockers, restrooms, and some food service.

Water-based facilities should be designed to relate well and function together with landside public areas (whether interior or exterior) and pedestrian amenities, such as the Harborwalk, parks, plazas and play areas, ferry waiting areas, restrooms, boat houses, and fishing-related services.

Some of the uses appropriate to the South Boston Waterfront watersheet are described below. The program and type of use included in any one development site will depend on a number of factors, including the location of the site, the proposed development program, and navigational conditions, among others. The type and location of watersheet uses will be determined through the City's Article 80 project review process and the DEP Chapter 91 licensing process.

Water Transportation Terminals. A major policy goal of the City is to promote the use of water transportation as an alternative to vehicular transportation both for work trips as well as excursions. In the past ten years, Boston has experienced a resurgence in the use of ferries for transportation, many of which have as their destination Boston Inner Harbor.

Water transportation service is provided by a number of operators who operate routes among the Inner Harbor neighborhoods of Boston as well as longer haul routes to other coastal communities on the north and south shores. To ensure that as the use of ferries grows and that there are sufficient terminals in the appropriate locations, the BRA undertook a study to recommend how and where to build new terminals or expand existing terminals.

The *Boston Inner Harbor Passenger Water Transportation Plan* (Water Transportation Plan) describes in detail where new terminals should be located and existing ones expanded and the types of services that are appropriate at different locations. Pre-

schematic concept plans are provided for each recommended terminal site that lays out the locations for different types of ferry dockage: inner and outer Harbor commuter vessels, excursion vessels, water taxi/Cultural Loop service, and layover berthing and service areas. A summary of the Water Transportation Plan is contained in Section 5.2.

On the South Boston Inner Harbor and in Fort Point Channel, the recommended terminal sites are:

- Russia Wharf/Boston Edison site: Inner Harbor shuttles, water taxi/Cultural Loop
- Children's Museum: water taxi/Cultural Loop
- Federal Courthouse: Inner Harbor shuttles, historic/educational vessels
- Fan Pier: Inner Harbor shuttles, excursion services, water taxi
- World Trade Center (east and west aprons): inner and outer Harbor shuttles, excursion vessels, water taxi/Cultural Loop, layover/service
- Fish Pier: service
- Wharf 8: Inner Harbor shuttles, excursion, layover/service
- Reserved Channel: charters

The *Boston Inner Harbor Passenger Water Transportation Plan* is hereby incorporated into the MHP by reference and it is requested that DEP rely upon it for guidance in issuing Chapter 91 licenses.

Marinas. The Waterways Regulations contain detailed standards for recreational boating facilities, including marinas. These standards address such issues as number of restrooms required, sewage pumpout facilities, utilities, design of lighting, and handling of petroleum fuels. These standards are generally adequate for the South Boston Waterfront with some additional requirements and amplification as described below.

- Marinas can play an important role in promoting access not only for the boating public, but also for the general public as well by creating links in the City's Harborwalk system. Marina operators have expressed to the City, however, that the goal of public access needs to be balanced with their need to provide reasonable security for their customers by restricting access to the floating docks and slips where the vessels are berthed. Therefore, marinas at a minimum should provide perimeter access on the bulkhead as part of the City's Harborwalk network, including Harborwalk amenities that may be appropriate to such a location such as benches, lookout areas, and binoculars. DEP should encourage marinas to allow the public to use their docks for special purposes, such as fishing derbies or viewing special events.
- Marinas should also help to respond to the general need for public transient dockage in Boston Harbor by making available slips for transient dockage. *See also*

subsections on Public Landings/Short Term Dockage and Transient Dockage for Visiting Boats.

- In order to ensure that marina facilities in the South Boston Waterfront are available to the general public, marinas must comply with the use standards for public recreational boating facilities found in 310 CMR 9.38(1).

Dockage at Seawalls and Bulkheads. The shoreline of a project site that consists of seawalls and bulkheads that abut waters accessible by vessels should be constructed and maintained in such a manner that vessels can be accommodated alongside for dockage. This will allow for additional space for special event dockage such as tall ships or emergency dockage for Harbor safety vessels.

Shoreline Walkways and Safety Ladders. Other sections of this report address the extensive public pedestrian network required of projects located in tidelands, such as Harborwalk. In any area along the waterfront that is accessible to the public, safety ladders should be provided every 75-100 feet.

Public Landing/Short-Term Dockage. In general, the Boston waterfront as a whole would benefit by having more locations from which the general public could access the shore from a boat for a short period. This is true of the South Boston Waterfront district as well. For the purposes of this discussion, the term *Public Landing/Short Term Dockage* will be used to refer to the following:

- Dockage for dinghies for those boaters using moorings;
- Dockage for passenger pick-up and drop-off lasting no more than ten to 15 minutes;
- Dockage for a short stay, such as one to four hours, and not including overnight dockage (often termed parking meters for boats).

Projects requiring a Chapter 91 license can respond to this need in different ways depending on whether the project is a water-dependent use project or nonwater-dependent use project.

Nonwater-dependent use projects should be required to provide dedicated space for a Public Landing/Short-Term dockage use. It is particularly important that facilities that attract the general public (e.g., hotels, restaurants, parks, museums, retail uses) should be accessible to the public from the shoreline and from the water.

This could take different forms depending on the size of the nonwater-dependent use project and the other water-dependent uses included in the project. In large development projects that include a full water transportation terminal, a portion of the terminal should be set aside for shared use by the water taxi and also for a Public Landing/Short Term Dockage area. This area should have a two to three-foot freeboard. The Water Transportation Plan shows these areas for each terminal site.

In smaller development projects, where a full terminal is not warranted, a small, stand-alone floating dock should be installed for shared use as a water taxi/public landing similar to the one recently installed at Sargents Wharf.

Water-dependent use projects, such as marinas, should be encouraged to accommodate Short Term Dockage needs by posting signs letting the boating public know how to make the necessary arrangements by phone or radio. While in general marina operators have an economic incentive to manage the demand for slips to accommodate short-term dockage, it is recommended that if a slip is vacant for more than 24 hours, that it be made available for short-term use.

Transient Dockage for Visiting Boats. There is also a need for transient slips for the boater who would like to come into Boston Harbor for a short stay. For the purpose of this discussion the term *transient dockage* will be used to refer to slips that are part of a marina that offer daily, overnight, weekly, or monthly stays.

- Nonwater-dependent use projects should be encouraged to increase the overall supply of dockage by including, where appropriate, a well-managed marina that offers transient dockage and includes the features discussed below.
- For new marina projects, DEP should require marina owners and operators to post signs visible to the boating public indicating the availability of transient slips with directions as to how to make necessary arrangements for transient dockage by telephone or radio. While in general marina operators manage the demand for slips to accommodate transient dockage, it is recommended that if a slip is vacant for more than 24 hours, that it be made available for transient use.

Short term dockage and transient dockage should not be confused with free dockage; it is assumed that there would be a charge for use of such space.

Fishing and Fishing Piers. One of the fundamental rights of the public protected by Chapter 91 is fishing. In nonwater-dependent use projects, the public should not be precluded from fishing. Landside support for this activity will be necessary such as fishing pole rentals.

Another water use that is encouraged along the South Boston Waterfront is fishing boat charters. Providing the general public with the ability to go out in the Harbor for a ½ day or a day-long fishing excursion will attract more people to the South Boston Waterfront.

New Piers and Floating Structures. On a limited basis, new piers and floating structures are appropriate for the South Boston waterfront provided they serve a water-dependent use, including public access. Such structures generally are not appropriate for nonwater-

dependent uses, such as residential uses, office space, hotels, etc.

Appropriate uses include water transportation terminals. In Fort Point Channel a new dock is proposed at the Russia Wharf /BECO site by the CA/T Project for water transportation. Similarly, the Fan Pier project includes a large pier in the Cove for a water transportation terminal.

Floating barges may be appropriate on a seasonal basis if they provide uses that attract and are for the public, such as a floating stage for theater or concerts, an outdoor cafe, a fishing location or where landside open space is limited, a “beach” barge for sunning. A good model is the “blues barge” installed last summer at Rowes Wharf for blues concerts. These types of structures should be bottom-anchored so that they do not occupy water sheet on a permanent basis and can be moved into place for seasonal use.

Permanently Moored Vessels. An increasing challenge to the management of watersheet is the haphazard installation of vessels as permanent or quasi-permanent structures. The use and location of these vessels is increasingly a matter of concern as to their impact on the public use of the watersheet, the aesthetic quality of these structures, and their effect on landside uses.

In many cases, a permanently moored vessel can contribute to an overall scheme of public activation, such as vessels that serve an historical or educational purpose. However, vessels or barges are sometimes also used for private, nonwater related uses, such as offices and residences, uses that are not in keeping with the City’s long-term vision for the area.

The regulation of permanently moored vessels or other structures is complex and depends on a number of factors. In some instances, such as a bottom-anchored vessel, an annual permit, known as a 10A permit, is required from the Harbormaster. A vessel with a permanent attachment to the land requires a Chapter 91 permit. If a vessel is not a U.S. Coast Guard certified vessel, but is permanently docked and occupied, it also comes under the City’s building code as a structure.

Currently underway is a watersheet planning effort for the Fort Point Channel, which will result in recommendations as to the type and location of uses appropriate to Fort Point Channel. In support of that effort, the City recommends restricting permanently moored vessels in Fort Point Channel to those that are public in nature (museums, educational, historical).

The City recommends that requests for approval (Chapter 91 License, 10A permit) to install a permanently moored vessel within the South Boston Waterfront Municipal Harbor Plan area be subject to BRA review for consistency with the Municipal Harbor Plan and the ongoing Fort Point Channel planning effort. *See also the section on Proposed Procedural Modifications.*

Navigation. In siting water uses, it is essential that channels of navigation be protected. These channels include a 75-foot wide channel on the east side of Fort Point Channel, the shipping channels in Boston Inner Harbor, and the various fairways between the major piers (Pier 4, Commonwealth Pier, Fish Pier).

7.4.2 Site Specific Standards and Guidelines

The *Public Realm Plan* described a water plan for the South Boston Waterfront by reference to three distinct bodies of water:

- the Channel District (includes Fort Point Channel, Fan Pier, Pier 4)
- the Piers District (includes Commonwealth Pier, Fish Pier, Wharf 8)
- the Working Port (includes the Reserved Channel).

Those portions of these districts within the boundaries of the Municipal Harbor Plan will be discussed here.

Fort Point Channel, along with the Fan Pier Cove will contain the greatest mix of craft for waterborne uses. A subcommittee of the Municipal Harbor Plan Advisory Committee has focused on the Fort Point Channel and has developed the following goals for its use:

- Activate Channel and edge for public year-round
- Maintain safe refuge for boats and navigation channel
- Maintain appropriate water-dependent uses
- Encourage water transit and supporting facilities
- Encourage state agencies to improve water quality
- Preserve watersheet
- Preserve historic resources
- Maintain unique character of Channel
- Maintain flexibility
- Establish strong connections to other waterfront attractions and destinations

While to date, the Committee has not reached consensus as to which uses may be appropriate to each basin of the Channel, some general recommendations can be made. Fort Point Channel will contain a terminal for an Inner Harbor water shuttle and water taxi service at the Boston Edison site. An additional smaller dock at the Children's Museum will provide dockage for the water taxi and a future Cultural Loop service. Water-oriented recreation for families and children is appropriate primarily in front of the Children's Museum, however, this area should be physically delineated so as not to interfere with the navigational channel on this side of Fort Point Channel or cause any restriction on vessel use. Floating barges for theater, concerts or seasonal entertainment and vessels devoted to museum or cultural uses will help to activate the Channel for public use and are appropriate depending on the location. Small-scale recreational boating, such as rowing or kayaking, is of interest, but should occur within the southern portions of Fort Point

Channel (Basins C and D) away from the larger water shuttle vessels and when water quality in Fort Point Channel permits. The use of the Channel for public activation should not interfere with the needs of the Gillette manufacturing plant, which is a water-dependent use. A 75-foot wide navigational channel on the east side of Fort Point Channel must be maintained.

Fan Pier Bulkhead and Cove. As described in the Public Realm Plan, the Fan Pier bulkhead can accommodate temporary docking for larger excursion or tour boats, historic vessels and the like. The protected nature of the Fan Pier Cove makes it ideally suited for a variety of water uses. The most important is water transportation. As further described in the *Water Transportation Plan*, a new terminal at Fan Pier should accommodate a mix of commuter, excursion and water taxi vessels, with the excursion vessels sited outboard and the more time-sensitive commuter vessels close to landside. A new pier in the middle of the Fan Pier Cove can accommodate the ferry terminal while also providing a protected waiting area for passengers and additional open space. Both sides of the terminal/pier should be available for active dockage. The edges of the Cove area appropriate for small-scale marina uses and in particular should provide a significant level of short-term dockage and transient dockage for the general public. The Cove edges are also appropriate for the dockage of educational vessels and floating barges for public events. While small recreational boating may be appropriate, it must not interfere with the use of the Cove by larger water transit vessels.

Pier 4. The long western apron of Pier 4 should respond to the active nature of the Fan Pier Cove. This area is well-suited for additional marina slips and should to the greatest extent possible provide slips for short-term and transient dockage. The eastern apron of Pier 4 is appropriate for a variety of vessels that require deep water access, such as historic or educational vessels or small cruise ships.

World Trade Center. As described in the Public Realm Plan, the Piers District provides a location and deep water for larger-scale vessels catering to the convention center, tourists and visitors. It is anticipated that the World Trade Center will continue to function as the primary water transportation terminal for the South Boston Waterfront. As described in the *Water Transportation Plan*, both sides of the World Trade Center's Commonwealth Pier should be utilized for water transportation, with an expanded terminal on the west side and a new terminal on the east side. These terminals should accommodate the full range of vessel types and uses, from the largest commuter ferries that provide service to the north and south shore, Inner Harbor shuttles, airport service and water taxis. The 1,200-foot long apron also allows space for dockage by excursion vessels, including vessels to Cape Cod, charters, and entertainment vessels. Given the deep water availability here, this water sheet could also accommodate a port-of-call cruise ship.

7.4.3 Proposed Procedural Modifications

The City believes that more oversight of moorings, floats, rafts, marinas and permanently-moored vessels than that currently provided by the Waterways Regulations is appropriate

in the South Boston Waterfront. The use of the watershed is integral to the planning of the landside uses and therefore proposed water uses need to be evaluated and reviewed in a more comprehensive fashion than currently required by the Waterways Regulations.

The placement on a temporary basis of moorings, floats, or rafts, including marinas, and vessels held by bottom anchor is subject to an annual permit from the harbormaster. In some instances a public hearing is required and the harbormaster's written determination must include certain findings, including that the project will serve a proper public purpose and not interfere with navigation, among others. These instances include floats or rafts that extend beyond the state harbor line, encompass an area greater than 2,000 square feet, or constitute a marina. 310 CMR 9.07(2)(b). Marinas must also conform to the requirements of 9.39(1). DEP may review the harbormaster's permit within 30 days and may affirm it, set it aside or amend it as it deems necessary. 310 CMR 9.07(2).

Because watershed use and management is increasingly becoming a planning issue, the BRA would like the opportunity to provide comment on all new 10A permit applications for moorings, floats, rafts, marinas and permanently-moored vessels within the watershed of the South Boston Waterfront Municipal Harbor Plan area, whether or not they meet the requirement for a public hearing, in order to evaluate such proposals against the City's planning efforts. Therefore, for proposed activities in the watershed of the MHP Area, the BRA is requesting notification and to be given 30 days to provide comment to the harbormaster and/or DEP for consideration in issuing permits. Future reconfiguration of marinas should also be subject to BRA review and comment to the harbormaster and to DEP. It is noted that Massport does not acknowledge BRA jurisdiction within its watershed; nonetheless, the opportunity for the BRA to provide comment formally or informally will assist in achieving coordination and an overall vision for waterside activities.

As the next stage of the *Water Transportation Plan*, the BRA is writing zoning regulations for the watershed of the South Boston MHP area and other areas of the Harbor.

7.5 OPEN SPACE AND PUBLIC SPACE

This Municipal Harbor Plan establishes a set of lot coverage and open space standards to guide property owners in the development of their property and to guide DEP in issuing Chapter 91 licenses for these parcels. Design and programming of open spaces must create a highly accessible and well-maintained waterfront supported by an array of public amenities and characterized by an ease of movement. This section includes baseline open space requirements and standards which will be applied throughout the South Boston Waterfront to achieve an accessible open space system. The requirements and standards cover the following:

- Lot Coverage Calculation
- 24 Hour Public Access

- Public Space Amenities
- Maintenance Plan and Standards
- Programming and Activation of Public Spaces
- Signage, Maps and Information

Lot Coverage Calculation: The Waterways Regulations limit the portion of a lot area that may include nonwater-dependent uses to 50%. The Waterways Regulations do not include the portion of a lot area that is watersheet in making this calculation. Also, new pile-supported and floating structures are not included in making this calculation. Thus, the building footprints of new structures for nonwater-dependent uses may cover 50% of only those portions of a parcel that are located on existing pilings or fill. This Municipal Harbor Plan maintains these restrictions.

The Waterways Regulations require the portion of lot area not contained within building footprints, or not devoted to water-dependent uses, to be open space for active or passive public recreation. Up to one-half of this open space area (essentially 25% of the total lot area) may be used for public roadways and public parking facilities. This Municipal Harbor Plan further limits the portion of lot area that can be used for parking and roadways.

While new roadways that are dedicated to public use are critical to the development of new public spaces that *feel* public, new parks and plaza areas are equally critical to the public's use and enjoyment of the waterfront. New streets in close proximity to the water serve an important purpose in getting people down to the water and creating an urban environment. They also clearly demarcate a line between a building's foreground and the public space. However, they also should be places where vehicular access can be limited with carefully designed controls that will promote active public use of the entire waterfront. In order to ensure that the South Boston Waterfront includes green spaces and plaza areas that will afford the public sufficient opportunity to enjoy the waterfront area, new roadways should not be permitted to overwhelm the public pedestrian spaces.

The South Boston Waterfront is primarily large blocks of land uninterrupted by secondary or tertiary roadways. Streets are an integral part of our public realm, providing both physical access through a site as well as visual access to the water. The connections created help to knit together the water with the area's interior spaces. In addition, streets will divide these large parcels into smaller blocks, prevent the areas immediately adjacent to the water from becoming privatized and establish a more pedestrian scale for the area. For these reasons, this Municipal Harbor Plan permits owners to exclude roadways that are dedicated to public use from the lot coverage calculation, provided such roadways meet the following criteria. First, the roadways must be dedicated to public use. Many of the new roads that will be built in the South Boston Waterfront will be dedicated to public use, although they will be owned, constructed and maintained by the property owner/developer. Second, the roadways must be *new*. Existing public roadways, are not eligible for this treatment. Third, surface parking facilities (except for streetside parking) are not eligible for exclusion from the lot coverage calculation. In fact, new surface parking facilities are

not permitted anywhere in the MHP Area. Fourth, such new roadways dedicated to public use may not account for more than 20% of the lot area. These additional restrictions are amplifications of the provision of the Waterways Regulations that permits existing roadways and above-grade parking facilities to be included in the portion of the site that is designated for open space.

This standard creates lot coverage and open space requirements that are both more restrictive and more relevant to the South Boston Waterfront than the corresponding Waterways provision. Without increasing the lot coverage ratio or reducing the amount of open space, this standard will balance the need to create the streets that will bring people to the waterfront and prevent the area from becoming privatized with the public spaces that will entice them to stay. It is the interaction of these two elements, streets and open space, that will establish waterfront sites in the area as locations for year-round public activity.

24-Hour Public Access. All open space area established within the MHP Area must be open and accessible to the public 24 hours per day. No gates, fences or barriers may be placed on the open space in a manner that would impede or discourage the free flow of pedestrian movement. Only temporary access restrictions, as may be required in emergencies or in connection with construction or maintenance, are permitted, and then only if such interference is minimized to the extent reasonably practicable and consistent with public safety, and such barriers are in place no longer than necessary.

Public Space Amenities. In order to maximize the public's use and enjoyment of the area, a mix of public amenities should be located throughout a site. Residents and visitors must have places to purchase ferry tickets, use a public restroom, call a water taxi, purchase snacks, rent small watercraft or fishing gear and to buy bait, and to enjoy the waterfront area whatever the weather. Not every use is appropriate for every site, nor is this intended as an exhaustive list, but these are the types of public amenities that are critical to the activation of the waterfront area. Also, since New England weather patterns can make the South Boston Waterfront inhospitable, protected areas where the public can wait for water transit or just relax and enjoy the Harbor will help to activate the waterfront during months and weather when the waterfront may be less appealing.

In some instances, these supporting amenities will be located within the ground floor of a site's larger development. In other instances, it may be appropriate to place some or a combination of these amenities in small structures located within a site's open space areas. For example, wind and shade structures in strategic locations can help to extend the appeal of being close to or on top of the water later in the season. Also, some of these structures could be erected on a seasonal basis. What is important to remember is that these small public structures are not meant to comprise a significant portion of a site's open space.

In designing and programming their open space areas, property owners should explore ways to combine functions, to locate desired uses within the ground floor spaces of their larger development and to use seasonal structures where possible. Many of these decisions must be made in the larger context of the design and programming of the entire site's

exterior and interior public areas. Because the Municipal Harbor Plan is not a project review process, much must be left to the Article 80 review process in terms of appropriate number, size and design of these types of structures. Our purpose here is to create the possibility and provide general guidelines.

Maintenance Plan and Standards. In order to ensure that a site's interior and exterior public areas are maintained at a level that will ensure that these areas will remain attractive, safe and accessible to the public, this Municipal Harbor Plan requires a Maintenance Plan and annual budget and includes baseline maintenance standards for the public realm which must be incorporated into this Maintenance Plan. A sub-committee of the Municipal Harbor Plan Advisory Committee has focused on developing these baseline standards, which address maintenance of parks, Harborwalk, streets, sidewalks, landscape areas, public restrooms, park and sidewalk furniture and watersheet. The sub-committee is continuing to refine these standards with input from the Advisory Committee and other interested parties. The most recent draft of the standards is included in Appendix 2. It is anticipated that, with time and experience, these standards may need to be amended from time to time by the BRA and shall be resubmitted to Executive Office of Environmental Affairs for their acceptance as amended pages to this Municipal Harbor Plan.

Programming and Activation of Public Spaces. Creative programming of open space and other public areas can contribute greatly to the activation of a site. The term "programming" can mean many different things, from providing amenities that support passive recreation to hosting special events such as the South Boston Waterfront Festival, and everything in between. The South Boston Waterfront can accommodate a broad range of programming options. The emphasis in programming, however, should be 1) to insure that the waterfront provides basic amenities such as seating and lighting and places for refreshments and restrooms to accommodate the public; and 2) to assure that the infrastructure can accommodate periodic events that serve to introduce residents and visitors to the accessibility of the waterfront and encourage them to return any time on their own. The waterfront should not be so overly programmed that the tranquility and beauty of the urban Harbor are spoiled and freedom to sit and read, fish or watch vessels go by is hindered.

As an amplification of the Waterways Regulations, property owners in the South Boston Waterfront will be required to develop programming strategies for their sites that will provide the public with an assortment of program options, from passive recreation to special events, and to take into account the infrastructure needs of the entire range of options. Each of the South Boston Waterfront sites is unique, and no single set of programming strategies will be appropriate for all areas. Property owners will be required to develop programs that reflect the unique characteristics of their sites, and coordinate their efforts where appropriate.

A sub-committee of the Municipal Harbor Plan Advisory Committee is focussing on civic events and festivals and what they can bring to this new neighborhood. The subcommittee is studying why this type of event will be important to the South Boston Waterfront, what

other communities are doing and implementation strategies. A preliminary report from the subcommittee is included in Appendix 3. Final recommendations shall be resubmitted to EOEa for their acceptance as amended pages to this Municipal Harbor Plan.

In addition to providing for special event programming, property owners also will be required to incorporate more passive recreational elements into their projects. Such elements should focus on providing cultural, educational and/or historic programming and uses that will enhance the waterfront area and draw people at all times of the year and in all kinds of weather, such as those discussed below. For larger sites, an integrated combination of new cultural, educational and historic programming may be appropriate, while owners of smaller sites may be required to incorporate only one or two such elements into their projects. Appropriate number and scale of these programming elements will be reviewed and determined during the Article 80 review process.

Historic Programming and Uses. The history of the waterfront is only one chapter of the story, but a very important one. As the South Boston Waterfront is built out over the next several decades, we have the opportunity to begin to tell the story of Boston Harbor in both large and small ways. New development in the South Boston Waterfront can incorporate elements that celebrate this history into exterior and interior public areas. For example, the BRA is in the process of developing an Historic Pier Network Plan for the North End Waterfront. The goal of this Network Plan is to tell the story of the North End Waterfront in a series of interior and exterior interpretive exhibits located on each of the area's piers. The South Boston Waterfront suitable for a similar historic network, and such components will be required at an appropriate scale and location within any new project through the City's Article 80 review process.

Cultural Programming and Uses. The Boston 2000 Committee appointed by Mayor Menino has selected the Institute of Contemporary Art (ICA) to occupy a waterfront parcel donated by the Pritzker family to the City for civic use. The ICA will provide property owners with a strong cultural base to build upon as they plan their sites. Owners can incorporate cultural elements throughout their sites, including works of public art, exhibits of local artists and artisans, concerts and other performances.

Educational Programming and Uses. New public areas also will provide opportunities to develop innovative educational programs focused on the Harbor and the City's working port. Property owners should consider how to incorporate programming into their sites that will help to develop an appreciation of Boston's important Harbor industries as well as natural waterfront elements. The Children's Museum's Camp on the Channel is one example of the type of creative educational programming we would like to see more of in the South Boston Waterfront.

Signage, Maps and Information. The City's Harborwalk signage program establishes a baseline for helping people to orient themselves throughout the Boston waterfront, but it is only a baseline. To help people to make the most of their time along the South Boston Waterfront, signs and maps directing the public to attractions, amenities and transit stops

must be located throughout a site. Likewise, information regarding nearby attractions, water transit schedules, hours of operation and a host of other items must be readily available to the resident and visitor alike. While signage is necessary, it must not be allowed to clutter or overwhelm the waterfront. It is also important to note that providing signage, maps and information is an ongoing obligation. As the South Boston Waterfront is built out over the next several decades, way-finding elements must be continually updated to provide the public with the accurate and reliable information they will need to take advantage of all that the area has to offer. Signage requirements for a particular site will be specified through the Article 80 review process.

7.6 FACILITIES OF PUBLIC ACCOMMODATION – 310 CMR 9.53(2)(C) FACILITIES OF PRIVATE TENANCY – 310 CMR 9.51(3)(B)

Facilities of public accommodation also will play an important role in the activation of the waterfront, especially the Inner Harbor. By encouraging a variety of public uses along the water, both interior and exterior, we have the potential to create an exciting urban experience that will welcome all, and at which all will feel welcome. To encourage a variety of public uses along the waterfront, this Municipal Harbor Plan establishes general standards for the following ground floor uses:

- Upper Floor Accessory Uses on the Ground Level

Upper Floor Accessory Uses on the Ground Floor. Because the South Boston Waterfront District will be a new neighborhood in addition to a new waterfront destination, a significant number of new residential units will be included in area developments. In order to accommodate the needs of new residential uses, a portion of the ground floor may be required for residential lobby space and other upper floor accessory uses. Upper floor accessory uses, defined in the Waterways Regulations as “utility and access facilities which must be located on the ground floor of any building to serve any facility of private tenancy located on any other floors”, are limited to 25% of the building footprint. The regulations provide the following examples: utility shafts, elevators, stairways and entryways. In view of the important role that facilities of public accommodation will play in creating an active public waterfront, we feel it is important to establish alternative, more restrictive standards to govern the size and location of these facilities.

To ensure that ground floor space that is required for upper floor accessory uses has the least possible negative impact on public water-related interests, the amount of ground floor space that may be devoted to these uses is limited to 20% of the building footprint. Residential lobbies and entrances may not front along the waterside of the building so that the portion of the ground floor located closest to the water will be available for water-dependent uses or uses that qualify as facilities of public accommodation. These requirements will minimize the negative impact of reducing the amount of ground floor space that will be devoted to facilities of public accommodation or water-dependent uses, while giving necessary support to the residential uses that are so important to creating a

true neighborhood. This requirement is an amplification of the corresponding provision of the Waterways Regulations.

7.7 BUILDING HEIGHT AND DESIGN STANDARDS - 310 CMR 9.51(3)(E)

- Urban Design Guidelines
- Universal Access Design Standards

Traditionally, heights along the Boston waterfront have increased as they stepped back from the water's edge, and heights in the South Boston Waterfront District will maintain this tradition. Overall height limits also are established for each subdistrict to ensure that development in the South Boston Waterfront does not emulate the height and density of the Financial District. New development in this District will have to broker the transition between the high-rise Financial District and the low-rise South Boston neighborhood, and the height limits established for each subdistrict take this important function into account.

The Public Realm Plan includes strong land use and urban design components as well as community benefits and protections. Proposed projects must take into account existing view corridors and the creation of new corridors. Urban design guidelines developed in the Public Realm Plan and incorporated into this Municipal Harbor Plan and the Interim Planning Overlay District for the area address many of these issues and enhance the height limits established for the various subdistricts and are included in Section 7.7.1, below. Based on community input, the BRA reduced the base height of buildings to no more than 150 feet and stipulated that higher components would have to be reviewed and approved through a Planned Development Area process and would have to provide for community benefits.

The quality of the design of not only open space and other public spaces, but also the buildings that frame these spaces is critical to the success of creating a new district provides both visual and physical access to the Harbor that is welcoming to the public. Therefore, urban design guidelines and universal access guidelines are incorporated into this Municipal Harbor Plan to guide new development.

7.7.1 Urban Design Guidelines

A major component of the Public Realm Plan is a set of preliminary urban design guidelines for each of the subdistricts of the South Boston Waterfront. These guidelines, included below, address, among other things, building scale and character, public spaces, street environments, sustainability and universal accessibility. These guidelines will be expanded and incorporated into final zoning for the South Boston Waterfront and applied to new and rehabilitated projects in the area in the City's Article 80 review process. In the interim, the South Boston Waterfront Interim Planning Overlay District (Boston Zoning Code Article 27P) incorporates the design guidelines of the Public Realm Plan.

The following general objectives are established for three primary reasons:

- to protect and enhance Fort Point Channel--the proposed center of activity in the South Boston Waterfront--and the adjacent late 19th and early 20th century industrial, commercial and civic buildings west of the Haul Road between new Northern Avenue and Gillette.
- to ensure that new commercial, residential, hotel, retail and civic development in Fan Pier, the Piers, the convention center and the Enhancement Zone effectively activate the proposed network of new parks, squares, walkways and shopping streets, and vice versa; and
- to provide a substantial number of affordable housing units for South Boston residents on sites in the South Boston Waterfront and South Boston neighborhood.

Fort Point Channel District: Boston Wharf and Wormwood

Building Scale and Character

- Singled out in the plan as a major center of activity, Fort Point Channel is positioned to develop into a very active public destination, and development should be of a scale compatible with its distinctive character.
- Inappropriate penthouse additions and additions designed to fill out the zoning envelope that detract from the historic and architectural integrity of the older warehouse buildings are discouraged.
- New infill buildings should contribute to the quality of the historic district by their compatibility with the predominant heights, scale, materials, colors, facade treatments, and relationship of buildings to streets; additional height will be considered on the two parcels adjacent to Fort Point Channel immediately to the north and south of Wormwood Park.

Public Space

- Minor streets, lanes, and alleys should be preserved and improved as pedestrian ways, since these features enhance the convenience and pleasure of walking through the district, control the scale of development, and maintain district character.
- New public spaces should be programmed and designed of a type, size and character appropriate to their locations.

- In addition to the overall public space network, the residential area should have a signature neighborhood park of at least one acre, ideally sited on the south side and adjacent to a retail edge. The neighborhood park is intended to be the centerpiece of a system of smaller parks and open spaces, such as tot lots and community gardens, that are located within new residential development parcels.

Piers District: Fan Pier, the Piers, the Convention Center and the Enhancement Zone

The architecture in this district should be contemporary, diverse and energetic, but coherent as a group of buildings. By drawing on the imagery of the port - its strength, simplicity and directness - every opportunity should be taken to reinforce a new sense of place, yet at the same time, familiar to Bostonians.

Building Scale and Character

- The sense of human scale in new construction should be emphasized through recognizable block and building sizes and shapes, modulated materials, detailed facades and storefronts, and articulated entryways.
- Buildings over 150 feet in height should be located on carefully targeted sites consistent with other urban design objectives such as public transit access, density distribution and district organization.
- All new development regardless of uses should enhance the unique character of its district.
- Building mass should be divided vertically to establish a pedestrian-scale rhythm and to relieve the expansiveness of large and undifferentiated blocks.
- Buildings should relate equally well to both the ground and to the sky, but not necessarily with the rigidly articulated formalism of the turn-of-the-century masonry warehouses in the Fort Point Channel area and downtown 19th century structures.
- Large, undifferentiated expanses of curtain wall and mirrored glass should be avoided. Lively facades with a variety of transparency, shadow, shade and layering should be constructed.
- Contemporary and traditional materials should be combined in inventive ways, with special attention to ground floor treatments that ensure inviting pedestrian surroundings.

The Street Environment

- The traditional pattern of Boston's blocks and street walls should be reinforced by setting the majority of a new building's exterior wall along the sidewalk in order to establish and maintain the street's continuity.
- Larger windows in the building facades at the ground floor should acknowledge passersby as well as those who use the building by providing special pedestrian-scaled design treatments to entries and storefronts.
- Along major pedestrian ways, storefronts with displays should be designed to give the sidewalk a sense of activity by being visually permeable and providing interest at close range.
- Protection should be provided from the cold, wind, and precipitation by adding covered and interior pedestrian ways and sitting areas with interior greenery, sunshine and views of the city without detracting from the primacy of the exterior pedestrian realm.
- In new construction the street space should be reinforced with a cornice line consistent with the traditional range of building heights in adjacent areas.
- Any building element that may rise above the prevailing cornice line should be related to its role as part of the skyline, using such treatments as variable setbacks, orthogonal and sculptured elements, and appropriate facade materials.
- Taller building elements should be designed in consideration of their impacts on light and wind conditions, views and visible sky at street level. Building tops should be shaped with attention to their view against the sky, with all mechanical and rooftop equipment integrated into the overall building form.

Sustainability and Universal Accessibility

- New structures in the South Boston Waterfront should incorporate currently available sustainable technologies in order to reduce both their pollution, energy costs and impact on the environment.
- Transportation, open space, access to the Harbor, pedestrian facilities and residential, civic and commercial buildings should be usable by all people to the greatest extent possible, without the need for adaptation or specialized design.

Through-Block Connections and Interior Public Spaces

- At appropriate locations, through-block connections and a system of enclosed open spaces should be incorporated in the form of pedestrian ways and public corridors to provide alternative protected routes during foul weather - a successful, longstanding tradition in the Financial District.
- In new development, additional public space should be provided whenever possible and appropriate. The design of public open space, interior spaces, and pedestrian ways should be an integral part of project design.
- New public space should be of a type, size, and character appropriate to its location in the Public Realm Plan.
- Fine art should be provided in public spaces; food service, performing arts, civic activities, and recreation facilities should also be accommodated where appropriate.
- Special features such as arcades, building overhangs, promontories, fountains, small seasonal skating areas, facade lighting, and environmental art are encouraged.

Parking and Loading

- Surface parking facilities are prohibited. Structured parking facilities also are prohibited in much of the South Boston Waterfront, but will be considered in areas east of the convention center or within the Fort Point Historic Subdistrict if such uses will serve as a buffer or provide parking for the neighborhood.
- Service and delivery activity should be located and scheduled to minimize disruption of pedestrians and peak hour traffic. Local delivery and service by small trucks is encouraged.
- Parking, truck entrances, and on-street loading should not impact pedestrian safety, not adversely affect the visual quality and activity of the building's street wall, and maintain low levels of street sound.
- The convention center must have a strong presence along elevated Summer Street and the proposed elevated roadway--parallel and directly adjacent to the Haul Road --the facility's main front doors and vehicular access points.
- The main entrance of the convention center should be of a grand scale that protects visitors from the weather and also allows views of the Harbor and of downtown Boston. Public art is encouraged. Safe and generous pedestrian crossings at street level must be provided to the north side of Summer Street at East Service Road,

Viaduct and D Streets to ensure street level activity and pedestrian access to the Harbor.

- The architectural vocabulary of the new convention center should be bold functional, forward-looking and expressive of its use, consistent with the robust and forthright architectural treatment evident in the brick warehouses and other maritime and industrial structures throughout the district.
- The architecture should be memorable and take advantage of the opportunities of large scale functional elements such as entrances, the long span roof and extensive public spaces within the building. The scale of the building, however, must be appropriately modulated to avoid monotony and excessive repetition; special attention must be given to minimize the physical and audible impacts of the large service areas, loading docks and large expanses of windowless walls.

The Enhancement Zone

- Developed in conjunction with South Boston community representatives, the Enhancement Zone should provide a compatible transition between the east and south edges of the proposed convention center and the adjacent industrial parcels and residential community.
- Recognizing that the area's uses and physical character are in rapid transition, the Enhancement Zone should be designated a special study area to allow for detailed site planning so that industrial uses are properly distributed and residential areas are developed and protected.
- In addition to design guidelines for new construction, it is also recommended that a program for improving existing industrial properties should be undertaken, including more stringent building code enforcement, fence repair, and the introduction of clear industrial signage standards.

7.7.2 Universal Access Design Standards

The Public Realm Plan makes a commitment to universal access design in the statement: "Transportation, open space, access to the Harbor, pedestrian facilities and residential, civic and commercial buildings should be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design." The following outcome standards are organized according to the seven principles of universal design and provide more specific guidance.

Equitable Use: *The design is equally useful, appealing and safe for all users.*

- Harborwalk provides for safe enjoyment of all users by differentiating areas for pedestrians, cyclists and users of other recreational equipment.

- All indoor and outdoor paths of travel are stable, firm and slip resistant regardless of weather.
- Vertical transportation options (stairs, elevators, escalators) are visible from lobby and included in a single signage system.
- Street furniture accommodates differing abilities and sizes of users and is placed at distances convenient for people with limited stamina or mobility.
- At least one restroom in areas of public accommodation is fully accessible and unisex to allow companion care and comfort for a diversity of users.
- All building design, construction, interior design, maintenance and management is attentive to providing the best possible indoor air quality by minimizing the use of potential contaminants and maximizing mitigating measures such as ventilation.
- Standard street furniture toilets are unisex, fully accessible, easy to understand through instructional symbols, self-cleaning, usable by children and adults, and designed for comfort and security of any user.
- Light timing at crosswalks is set to allow all users to cross the street safely during a walk signal including small children and people using wheelchairs and canes.
- Retail businesses display merchandise at varying and easy to reach heights as well as allow a clear width for ease of movement throughout interior.

Flexibility in Use: *The design accommodates a wide range of individual preferences and abilities.*

- Design sidewalks wide enough to be used as gathering spaces without impeding other pedestrians.
- Intersections use multi-sensory (sight, sound, touch) indicators for safe crossing.
- Include multi-sensory elements (smell, sound, touch) in landscape features outdoors and indoors.
- Include counters at varying heights to allow transactions and comfortable sightlines for a variety of standing and seated users at outdoor vending places and indoor food outlets.
- Offer options of unfixed seats in restaurants and bars and, if using a high stool option, provide standard height seating also.
- Offer tactile (raised letters and braille) and/or audio option for accessing information at historical markers along the Harborwalk.
- Make lighting in places of public accommodation adjustable in brightness for areas in which visitors require task lighting (e.g., registration, menu reading, lip-reading).

Simple and Intuitive Use: *Design is easy to understand, regardless of user's experience, knowledge, language skills, or current concentration level.*

- Standardize signs and symbols for public parking places throughout the district.
- Install digital or two dimensional district maps with clear indications of landmarks, routes and public restrooms at Silver Line stations; include audio option.
- Create visual and tactile markers to direct visitors to destination sites.

Perceptible Information: *The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.*

- A uniform and legible system of wayfinding includes signs with standard fonts, size and color, use of landmarks as cues to orientation, and standardization of symbols and terminology throughout the district.
- Clear schedules and fares are posted for all water recreation and transportation vehicles at the waiting area and installed at a height readable by a seated person.
- Lobbies and public spaces will be designed to maximize acoustical conditions that minimize ambient noise and enhance voice clarity.
- Define edges out of doors, especially at the Harbor's edge and on docks by adding a change in texture and/or color or by illuminating the outer edge.

Tolerance for Error: *The design minimizes hazards and the adverse consequences of accidental or unintended actions.*

- Design sidewalks with standard 'zones' for curb, furnishings, pedestrians, and frontage.
- Minimize glare on large vertical glass surfaces; delineate doors with color contrast; and mark surface with designs to indicate presence of invisible surface.
- Install mirrors at entry and exit points to parking garages as well as visual and sound alarms to alert pedestrians passing entries and exits.
- Select matte finishes for indoor flooring that are stable and minimize glare.
- Install handrails and guardrails on the land side of flat docks for stability and safety for adults and children.

Low Physical Effort: *The design can be used effectively and comfortably and with a minimum of fatigue.*

- Exterior doors will be a minimum of 36" wide and designed to allow easy opening with a minimum of strength and no need to grip.
- Eliminate obstructions in front of mirrors in public restrooms.
- Provide shelter and seating at public transit stops for ground and water transportation.
- Design street crossings with protected median areas to allow safe crossing for pedestrians at multi-lane, two-way arteries.

Size and Space for Approach and Use: *Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.*

- Design all public spaces with sufficient turn-around space for strollers, scooters, crutches, wheelchairs, walkers and guide dogs.
- Distribute accessible seating in entertainment and sports venues to permit choice for all users without forfeiting line of sight.
- Create pedestrian access corridors between destinations and parking or public transportation sites that do not use stairs but level access or elevators.

8.0 THE PUBLIC REALM PLAN AND THE CITY'S APPROACH TO SUBSTITUTIONS AND OFFSETS

In developing this Municipal Harbor Plan, our planning was guided by the five primary planning principles defined in the Public Realm Plan, the City's general Harborpark policies and the Commonwealth's tidelands policy objectives. The Public Realm Plan expressed ambitious goals for the area to become a new vibrant mixed-use urban neighborhood. In the course of developing this Municipal Harbor Plan, two things became clear. First, we realized that while we could work generally within the numerical parameters of Chapter 91 to achieve these goals, we would need to seek certain substitutions in order to create a neighborhood that truly reflects the density and character of our older city. Second, refinements to certain features of the Public Realm Plan also would help us better to achieve both the City's planning objectives for the area and the Commonwealth's tidelands policy objectives.

For those portions of the South Boston Waterfront outside the industrial port, the Public Realm Plan envisions a lively, *urban* waterfront neighborhood, characterized by a mix of uses, including open space, residential, office, hotel, retail, civic and cultural. Each of these uses is important to the development of an urban neighborhood. Residential and office uses are particularly important to the creation of year-round pedestrian activity, because they bring people to the waterfront regardless of weather or time of year. Retail and restaurant uses are important to residential and office users, and can be an important draw for a broad range of the public as well. Cultural and civic uses help to bring visitors and residents from other City neighborhoods to the waterfront. Open space and Harborwalk provide spaces for residents and visitors to enjoy a close connection to the water. This Municipal Harbor Plan expands upon the use parameters developed in the Public Realm Plan in order to help achieve this balanced mix of uses. While the Public Realm Plan required that new development include 25% residential use, to ensure that a critical mass of housing is included throughout the South Boston Waterfront, this Municipal Harbor Plan requires new, large-scale mixed-use developments to include at least one-third residential uses. In addition, to ensure that other uses critical to Boston's economy and the development of the area as a neighborhood are accommodated, such as cultural and civic uses, hotels, retail uses and restaurants, this Municipal Harbor Plan prohibits large-scale development projects from including more than one-third office uses. These parameters will help to accomplish the balanced mix of all of these uses that is essential to the creation of an urban waterfront neighborhood.

The second component of the equation for the development of an urban waterfront neighborhood is that each of these uses must be present in sufficient density to generate a high level of pedestrian activity throughout the year. This Municipal Harbor Plan also expands upon the Public Realm Plan by providing additional guidance with respect to density. Although not, strictly speaking, a Chapter 91 issue, density is critical to the development of the South Boston Waterfront as a true neighborhood. When developing density ranges for the South Boston Waterfront area, we look to other City neighborhoods for guidance. For example, the Back Bay neighborhood, which many people consider a

useful model for an active, vibrant, residential mixed-use neighborhood, has a floor area ratio of approximately 3.9. By way of contrast, the Financial District, by far the most densely developed area in the City, is almost three times as dense as the Back Bay, with an approximate floor area ratio of 10.5. While densities approaching that of the Financial District are clearly inappropriate for any portion of the South Boston Waterfront, densities similar to Back Bay may not provide the level of activity that will result in a truly activated waterfront neighborhood and destination. Appropriate density levels for the various subdistricts of the South Boston Waterfront vary. For the Inner Harbor, which is intended to become a vibrant, active destination that attracts residents and visitors year round, floor area ratios of new large-scale developments should range from 5 to 5.5. This area is furthest from the Fort Point and South Boston residential areas and is intended to be a focal point for Harbor activity. In the Fort Point Historic Subdistrict, which, similar to Back Bay, is intended to become a residential mixed-use neighborhood, floor area ratios should not exceed 3.5 to 4.0.

With respect to the Fan Pier site, we learned that what we considered an appropriate density was achievable on the site without substitutions from the Waterways Regulations. Therefore, the determination was made to require that the overall build-out of the site approximate the massing of a hypothetical "full build-out" of the area that would be achieved in strict conformity with the height, open space and waterfront setback rules of the Waterways Regulations. Thus, use of the height substitution for the Fan Pier will not be allowed to result in any significant increase in the intensity of development on this prominent waterfront parcel, but will simply allow the permitted (and appropriate) density to be developed under a vastly superior design scheme. With respect to Pier 4, the alternative height zones will allow a density of development consistent with the Fan Pier, a much more appropriate outcome than would be obtained by the mechanical application of the Waterways Regulations to this smaller, unusually-shaped parcel. In the Wormwood area, the appropriate density level is less than what is achievable under the Waterways Regulations.

Just as strict application of the Waterways Regulations is not the most effective way to achieve an active, urban waterfront, it also is not always the most effective way to promote Chapter 91 policies. In some locations, different height or setback requirements can do as much or more to promote public use and enjoyment of the tideland areas than the corresponding provisions of the Waterways Regulations. A strong pedestrian environment and land side and water side access to the water's edge and a critical mass of people are essential to the Municipal Harbor Plan and consistent with state tidelands policy objectives. Taller, slender buildings, urban character public streets that bring people close to the water, buildings that create strong street walls along the sidewalk and pedestrian-oriented view corridors and pathways that are part of the open space system may in some instances achieve the tidelands and urban planning goals to a higher degree. In other instances, different heights or setback requirements which may be desirable from an urban design or economic development perspective may have negative impacts on the pedestrian experience or waterfront environment.

The Waterways Regulations, which establish the same use and dimensional parameters for waterfront development throughout the Commonwealth, are not the most effective means to achieve the City's goal of a vibrant, urban waterfront neighborhood. This Municipal Harbor Plan, therefore, includes substitute provisions that are designed to achieve the active, pedestrian-oriented waterfront area that is envisioned by the Public Realm Plan. Under the Waterways Regulations and the MHP Regulations, as many as eight different quantitative requirements of the Waterways Regulations may be modified in a municipal harbor plan. For the South Boston Waterfront District as a whole, we have included substitutions for only five of these requirements. For three of these five categories, substitutions are only requested for a small number of "infill" parcels, or for parcels only a fraction of which lies within jurisdiction. These substitutions are necessary in order to deal with development problems associated with the small size of the parcels. We do not include substitutions for the requirements governing new or expanded pile-supported structures for nonwater-dependent use, pedestrian access networks or interior facilities of public accommodation at any location within the district.

The MHP Regulations permit a municipality to include substitute provisions that are less restrictive than the waterways requirements provided that the plan includes other requirements which, considering the balance of effects on an areawide basis, will mitigate, compensate or otherwise offset adverse effects on water-related public interests. The combination of substitute provisions and compensatory, mitigation and offsetting measures must promote state tidelands objectives with comparable or greater effectiveness.

In accordance with the Waterways Regulations, it is the negative impacts of numerical substitutions that must be offset. It is assumed that impacts of any construction will be minimized to the extent practicable through the Article 80, MEPA and Chapter 91 permitting and licensing processes. The City's approach to offsets is essentially the same as the City's approach to substitutions. To the extent that particular substitute provisions create negative impacts on public water-related interests, the question we ask is, how can we offset these impacts in a way that also will promote active public use of the urban waterfront? Just as our substitute provisions are designed to achieve a dense, active, urban waterfront, the same is true of our offsetting measures.

Sections 8.1 through 8.8 of this Chapter discuss the changes made to the Public Realm Plan in the context of the provisions of the Waterways Regulations for which substitutions may be proposed. Then, for each substitution, there is a general discussion of the types of substitute provisions contained in this Municipal Harbor Plan that are necessary to implement the Public Realm Plan. Section 8.9 discusses the types of offsetting measures that will be used on a site-by-site basis to compensate and offset the negative impacts of the site's substitute provisions. The substitute use and dimensional requirements, impact analysis and offsetting measures applicable to particular sites are detailed in each subdistrict chapter.

8.1 WATER-DEPENDENT USE ZONE – 310 CMR 9.51(3)(C)

The requirement to maintain a water-dependent use zone, or setback as it is more commonly referred to, is designed to maintain sufficient space at the water's edge both for water-dependent uses and public access. Buildings constructed too close to the water's edge can render a waterfront area unsuitable for certain water-dependent uses, and create a pedestrian environment that is cramped and uninviting, and therefore underused. On the other hand, strict application of the Chapter 91 requirements also can discourage public access by hindering a density of activity close to the water or by resulting in poor design. For these reasons, a certain amount of flexibility in the size and configuration of the water-dependent use zone is required.

8.1.1 The Public Realm Plan and the Water-Dependent Use Zone

Figure 8-1 compares the setback of the Public Realm Plan to the setback provisions of the Municipal Harbor Plan. In response to public comment for concentrations of open space at the water's edge, this Municipal Harbor Plan increases the setback along several important edges. See Figure 8-1. The building setback along the fan edge of Fan Pier, which was approximately 70 feet in the Public Realm Plan, is increased to 140 feet. At the Harbor edge of Pier 4, the Public Realm Plan depicted a 30-foot setback. This Municipal Harbor Plan increases the setback to 200 feet. On Fan Pier, the overall setback area at the fan edge is doubled, creating an open space area that is large enough to host public festivals and events similar in size to Harborfest or the Jimmy Fund Scooper Bowl. On Pier 4, the overall setback area increases from approximately 5220 square feet to approximately 34,800 square feet, creating a park area similar in size and configuration to Long Wharf park, a popular downtown area for sitting and relaxing. In the Fort Point Historic subdistrict, there is no change from the Public Realm Plan.

8.1.2 The Regulatory Water-Dependent Use Zone Requirement

The Waterways Regulations prohibit new or expanded buildings for nonwater-dependent use, and parking facilities at or above grade for any use, from being located within a water-dependent use zone. The width of the water-dependent use zone, which varies considerably throughout the South Boston Waterfront, is determined as follows:

- a. along the ends of piers and wharves, the zone extends for the lesser of 100 feet or 25% of the distance from the edge to the landward lot line of the property, but not less than 25 feet;
- b. along the sides of piers and wharves, the zone extends for the lesser of 50 feet or 15% of the distance from the edge to the edge immediately opposite, but not less than ten feet; and
- c. along portions of other project shorelines, the zone extends for the lesser of 100 feet or 25% of the weighted average distance from the present high water mark to the landward lot line of the property, but not less than 25 feet.



Figure 8-1 Comparison of Public Realm Plan and Municipal Harbor Building Heights and Waterfront Setback

Project Shoreline is defined in the Waterways Regulations as the high water mark, or the perimeter of any pier, wharf or other structure supported by existing piles or to be replaced pursuant to 310 CMR 9.32(1)(a)4., whichever is further seaward. The DEP shall waive these numerical standards if the project conforms to an approved Municipal Harbor Plan which specifies alternative setback distances and other requirements which ensure that new buildings for nonwater-dependent use are not constructed immediately adjacent to a project shoreline, in order that sufficient space along the water's edge will be devoted exclusively to water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(c).

8.1.3 General Provisions Relating to Substitutions for the Regulatory Water-Dependent Use Zone Requirement

Substitutions to the provision of the Waterways Regulations that governs the depth of the water-dependent use zone will permit us to create significant park areas, including public amenities, that will help to draw people to the waterfront area and promote access to Boston Harbor as a shared natural resource. Equally important to the City, these park areas will support and make more attractive the new neighborhoods that will develop behind them.

There are two types of flexibility that this Municipal Harbor Plan will provide with respect to the regulatory setback requirement:

- Limited Reduction in Depth of Water-Dependent Use Zone
- Reconfiguration of Water-Dependent Use Zone

Limited Reduction in Depth of Water-Dependent Use Zone. The first type of flexibility is a simple reduction in the depth of the setback from that required under the Waterways Regulations. In light of the importance of maintaining sufficient waterfront space for public access and other water-dependent uses, this approach is not favored by this Municipal Harbor Plan, and therefore is permitted only at two locations: the Barking Crab site in the Inner Harbor and 60 Necco Court in the Fort Point Historic subdistrict. A detailed discussion of each of these sites, including substitute provisions and offsets, is included in Section 10.7 (Barking Crab) and Section 11.6 (60 Necco Court) of this Municipal Harbor Plan.

Reconfiguration of Water-Dependent Use Zone. The second type of flexibility is available generally throughout the Inner Harbor subdistrict. While Chapter 91 dictates a particular configuration of the water-dependent use zone on the Fan Pier and Pier 4 parcels, this Municipal Harbor Plan reconfigures the Chapter 91 water-dependent use zones. Neither of these reconfigurations reduces the overall square footage of the setback area. The purpose of the reconfiguration is to redistribute the setback area on the sites in a more advantageous configuration. The Municipal Harbor Plan configurations concentrate open space at the wharf edges where it will be more effective, and create smaller setbacks

in other locations where they can help to bring ground floor public uses closer to the water's edge. These reconfigurations create more significant open space and more interesting edges, and extend the appeal of some of the outdoor spaces to later in the season. A more detailed discussion of this substitute provision is contained in the Sections 10.3.1 (Fan Pier) and 10.4.1 (Pier 4) of the Inner Harbor chapter.

8.2 PUBLIC ACCESS NETWORK – 310 CMR 9.52(1)(b)

For projects containing a water-dependent use zone, the Waterways Regulations require a project to include a pedestrian access network of a kind and to a degree that is appropriate for the project site and the public water-related facilities at the site. At a minimum, the network must consist of: walkways and related facilities along the entire length of the water-dependent use zone; wherever feasible, such walkways shall be adjacent to the project shoreline and except as otherwise provided in a municipal harbor plan, shall be no less than ten feet in width; and appropriate connecting walkways that allow pedestrians to approach the shoreline walkways from public ways or other public access facilities to which any tidelands on the project site are adjacent. 310 CMR 9.52(1)(b)

This Municipal Harbor Plan does not contain any substitutions for this provision. The standard for the City's public access network, Harborwalk, is 12 feet wide. Throughout much of the South Boston Waterfront, Harborwalk will be a great deal wider. In addition, Harborwalk is not just a public walkway. It includes seating, lighting, landscaping, public works of art, fishing piers, public landings, public restrooms, observation decks, and is, of course, handicapped accessible throughout. Property owners and developers are required to complete Harborwalk along the seaward edge of their parcels in accordance with the Harborwalk standards developed by the BRA. Although the Harborwalk standards require a minimum walkway width of 12 feet, given the large size of most of the parcels in the South Boston Waterfront, the exact dimensions of Harborwalk as a component of the setback will be determined in the Article 80 review process.

8.3 LOT COVERAGE AND OPEN SPACE - 310 CMR 9.51(3)(d)

The location and design of open space plays an important role in a waterfront's ability to draw people and become part of their routine. Strict application of the Chapter 91 requirements to the South Boston Waterfront will not necessarily result in the most hospitable open space areas. Because, for example, the Inner Harbor faces north, expanding the number of months that at least a portion of the Inner Harbor will be attractive to pedestrians and for outdoor uses may require the creation of areas that are, although completely open, also sheltered in some respect by the surrounding buildings. The combination of substitutions for and amplifications of the regulatory lot coverage and open space requirements can provide property owners with the flexibility to design and locate open spaces and recreational facilities so that public use and enjoyment of the waterfront will be maximized.

8.3.1 The Public Realm Plan and Lot Coverage

The open space plan of the Public Realm Plan is shown in Figure 4-1. In response to public comment, the open space plan of the Municipal Harbor Plan, shown in Figure 8-2, increases the amount of open space in both the Inner Harbor and the Fort Point Historic Subdistricts. In the Inner Harbor, for the Fan Pier parcels the Public Realm Plan included approximately 48% open space. The Municipal Harbor Plan increases the open space percentage to 50%. On Pier 4, the Public Realm Plan provided for 35% open space, while the Municipal Harbor Plan increased the open space requirement to 50%. In the largely unbuilt southern portion of the Fort Point Historic Subdistrict, denoted as "Wormwood" in the Public Realm Plan, the Public Realm Plan includes approximately 51% open space in the area of Chapter 91 jurisdiction. The Municipal Harbor Plan configuration depicts approximately 61% open space over the same area.

The Municipal Harbor Plan also changes slightly the configurations of open space in the Inner Harbor and the Fort Point Historic Subdistricts. In the Public Realm Plan, the bulk of the open space in the Inner Harbor is located on a new, large pier to be constructed in the middle of Fan Pier Cove. In the Municipal Harbor Plan, the bulk of the open space is located on existing fill concentrated at the fan and cove edges of Fan Pier and at the Harbor edge of Pier 4, and a 200-foot wide public green area that will stretch from the Cove to new Northern Avenue. Fan Pier Cove is slated to become a highly active public area with a myriad of watersheet uses, including water transit, small boat rentals and marina uses, as well as public access uses such as fishing, relaxing and enjoying being by the water. By placing the open space on existing fill rather than constructing a large new pier, we preserve watersheet for a wider variety of water-dependent uses. For example, a smaller pier at the center of the cove with docking capability on both sides can accommodate a range of water transit, including commuter and excursion vessels. New marina berthing will help to alleviate a shortage of such space in and around the Inner Harbor. The wave attenuation structure that makes the cove suitable for smaller craft doubles as a fishing and public access pier. Concentrating public open space on existing landfill allows us to accommodate many more water-dependent uses in the cove itself.

In the Wormwood area of the Fort Point Historic Subdistrict, the majority of the open space is concentrated in a 3.5 acre greenway connecting the Channel to the convention center, approximately 1.25 acres of which is in the MHP Area. This Municipal Harbor Plan varies somewhat the configuration of the greenway area. The Central Artery/Tunnel Project tunnel box runs under the Wormwood area at a diagonal and land areas over the tunnel box cannot support development. The initial straight configuration of the greenway area does not take into account the limitations imposed by the location of the tunnel box. The BRA worked with the property owner to reconfigure this open space to allow buildings where the ground will support structures and to maintain the connection between the convention center and the Channel. The Municipal Harbor Plan configuration, shown in Figure 8-2, accomplishes both of these objectives.

The street and block plans and pedestrian circulation networks of the Inner Harbor and the Fort Point Historic subdistricts have responded to the increased amount of open space and the revised open space configurations. Figures 4-1 and 8-1, which depict the open space configurations under the Public Realm Plan and the Municipal Harbor Plan respectively, also show the street and block configurations under each of the plans. Figures 4-2 and 8-3 depict the corresponding pedestrian circulation network for each open space configuration.

In the Inner Harbor, concentrating open space at the ends of Fan Pier and Pier 4 necessarily pushes the buildings further back from the water's edge. Because small blocks are important to creating a pedestrian-friendly environment, the Public Realm Plan included six building blocks between Court Street and West Service Road on the Fan Pier. By maintaining six building blocks in this area even with the larger setback from the fan edge, we are able to create even smaller blocks and maintain the same number of view corridors.

In the Wormwood area, the reorientation of the open space around the configuration of the tunnel box generates a new street and block plan also characterized primarily by smaller blocks. In this case, however, the new configuration results in an increase in the number of view corridors between A Street and Fort Point Channel from one to three. These changes increase public access and enjoyment of the waterfront by making it easier to see and easier to get to from the surrounding areas. See Figures 4-1 and 8-1.

8.3.2 The Regulatory Lot Coverage Requirement

The Waterways Regulation require that, with respect to private as well as Commonwealth tidelands, structures for nonwater-dependent uses may not exceed a 50% lot coverage ratio. Lot area used for water-dependent purposes is not subject to the 50% limitation. The DEP shall waive this numerical standard if the project conforms to an approved Municipal Harbor Plan which specifies alternative site coverage ratios and other requirements which ensure that, in general, buildings for nonwater-dependent purposes will be relatively condensed in footprint, in order that an amount of open space commensurate with that occupied by such buildings will be available to accommodate water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(d).

8.3.3 General Provisions Relating to Lot Coverage Substitutions

Open space is an important component of any neighborhood, and having sufficient open space is an important factor in making a neighborhood truly livable. For this reason, only in a limited number of circumstances will substitutions in the percentage of lot coverage/open space be permitted. Certain of the South Boston Waterfront parcels are extremely small, or face extraordinary infrastructure challenges. In order to permit redevelopment to occur, and to encourage redevelopment of a kind that will contribute to the fabric of the City's waterfront in a meaningful way, more than 50% lot coverage will be permitted at a limited number of sites, including the Barking Crab site and for infill development sites in the northern portion of the Fort Point Historic District. Each of these



Figure 8-2 Municipal Harbor Plan- Open Space Plan



Figure 8-3 Municipal Harbor Plan- Pedestrian Circulation Network



sites is so unique that no universal set of substitute provisions, criteria and offsets is possible. Accordingly, the lot coverage substitution for each of these sites is discussed in the section of this Municipal Harbor Plan addressing the relevant geographic area.

8.4. OPEN SPACE FOR PUBLIC RECREATION – 310 CMR 9.53(2)(b)

For nonwater-dependent use projects located on Commonwealth tidelands, that portion of the site not located in the building footprint must include exterior open spaces for active or passive public recreation, such as parks, plazas and observation areas. The amount of such space shall be at least equal to the square footage of all Commonwealth tidelands on the project site landward of the project shoreline and not within the footprint of any buildings, less any space deemed necessary by the DEP to accommodate other water-dependent uses. The Waterways Regulations permit a portion of the open space located on Commonwealth tidelands to be used for public ways and above-ground parking facilities, provided that below ground facilities are not a reasonable alternative, and provided that the amount of space devoted to public vehicular use does not exceed the amount devoted to public pedestrian use. The DEP shall waive this requirement if the project conforms to an approved Municipal Harbor Plan that specifies alternative requirements for public outdoor recreation facilities that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. 310 CMR 9.53(2)(b).

One of the primary public benefits that will be obtained by the redevelopment of the South Boston Waterfront will be new public outdoor recreation facilities, such as Harborwalk, parks, plazas, docks, piers and promenades in an area that currently offers little in the way of public access. The only substitution of this provision that is included in this Municipal Harbor Plan are for those parcels for which lot coverage substitutions are included. To the extent that a lot coverage substitution results in less open space, it necessarily results in a corresponding reduction in the amount of open space available for public recreation. For the purposes of this Municipal Harbor Plan, the open space substitution is available only to those sites that also have a lot coverage substitution, and must be in direct proportion to the site's corresponding lot coverage substitution.

8.5 FACILITIES OF PRIVATE TENANCY – 310 CMR 9.51(3)(B)

The provisions for facilities of private tenancy are designed to prevent privatization of the waterfront. By controlling the locations where facilities of private tenancy are permitted, the Waterways Regulations seek to ensure that areas adjacent to the water are open and welcoming to the public and available for water-dependent uses.

8.5.1 The Regulatory Requirement Regarding Facilities of Private Tenancy

The Waterways Regulations prohibit locating nonwater-dependent facilities of private tenancy on pile-supported structures on flowed tidelands, or at the ground level of any

filled tidelands within 100 feet of a project shoreline. The DEP shall waive this use limitation if the project conforms to an approved Municipal Harbor Plan which specifies alternative limitations and other requirements which ensure that no significant privatization of waterfront areas immediately adjacent to the water-dependent use zone will occur for nonwater-dependent purposes, in order that such areas will be generally free of uses that conflict with, preempt, or otherwise discourage water-dependent activity or public use and enjoyment of the water-dependent use zone, as appropriate for the harbor in question. 310 CMR 9.51(3)(b).

8.5.2 General Provisions Relating to Substitutions for Facilities of Private Tenancy Requirements

In order to further the goal of creating a highly active urban waterfront area, at one location residential or commercial facilities of private tenancy are permitted to be located on the upper floors of structures located on piers. This substitute provision is available only to the Barking Crab site, which is unique among all of the parcels located in the MHP Area. Permitting these uses over water at this location will enhance activation and public use of the waterfront by supporting facilities of public accommodation and providing 24-hour activity. A detailed discussion of the site, its substitute provisions and offsetting measures, is contained in Section 10.7 of the Inner Harbor chapter.

8.6 FACILITIES OF PUBLIC ACCOMMODATION- 310 CMR 9.53(2)(c)

For projects located on Commonwealth tidelands, the Waterways Regulations require that 100% of the ground floor of structures containing nonwater-dependent uses be devoted to facilities of public accommodation. The DEP will waive this requirement if the project conforms to an approved Municipal Harbor Plan which specifies alternative requirements for interior facilities of public accommodation that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. 310 CMR 9.53(2)(c).

Requiring ground floor facilities of public accommodation is an important component of the City's strategy to activate the South Boston Waterfront. The Waterways Regulations define facilities of public accommodation as "facilities at which goods or services are made available directly to the public on a regular basis, or at which the advantages of use are otherwise open on essentially equal terms to the public at large." 310 CMR 9.01. Examples of interior facilities of public accommodation referenced in the regulations include restaurants, performance areas, hotels, retail establishments, and educational and cultural institutions. By encouraging a variety of public uses along the water, both interior and exterior, we have the potential to create an exciting urban experience that will welcome all, and at which all will feel welcome. This Municipal Harbor Plan does not include any substitutions at any location in the South Boston Waterfront for this provision.

8.7 BUILDING HEIGHT – 310 CMR 9.51(3)(e)

As in Boston's other neighborhoods, a mix of uses is the best way to ensure that an area will support strong levels of activity throughout the day and evening. Offices and retail stores and services generate daytime activity. Hotels, restaurants and cultural and entertainment uses generate evening and weekend activity. Residences generate early morning, evening and late-night activity, give life to an area and sustain local services. A combination of these uses will help to ensure that an area is activated at all times.

The other important factor in this equation is that each of these uses must be present in a sufficient density to generate an appropriate level of activity and create a functioning neighborhood. Although strict application of the Chapter 91 height limits will, in some subdistricts, permit a significant density of development, it can also create large building footprints and massive blocks that do little to create an inviting atmosphere, pedestrian or otherwise, from an urban design perspective. In addition, both the Public Realm Plan and this Municipal Harbor Plan call for extensive public access infrastructure by private property owners that can best be sustained if the accompanying development is sustainable.

8.7.1 The Public Realm Plan and Building Height

The Public Realm Plan envisions the South Boston Waterfront as a lively, urban waterfront neighborhood, with heights and densities that complement the city's existing urban fabric. The urban design analysis for the South Boston waterfront calls for a variety of building typologies and heights which vary from one sub-context to another. Along Fort Point Channel, heights and massing that reflect and are complementary to the historic Boston Wharf district are appropriate. These heights as proposed range from 75 to 125 feet. In the Inner Harbor Subdistrict, the built context is less clear. The cues are the downtown waterfront which slopes down toward the water; the Seaport Hotel at 195 feet in height; the East and West Office Towers at 237 feet and 248 feet in height, respectively; the federal courthouse at 155 feet in height with a linear wall along old Northern Avenue that is more than 300 feet long; and the proposed convention center, which will be approximately 110 feet tall at Summer Street. The Public Realm Plan established very general parameters with respect to heights throughout the South Boston Waterfront which are shown in Figure 4-3.

For the Inner Harbor, the Public Realm Plan limits heights to 75 feet within 200 feet of the pier and bulkhead line, after which heights may increase as the buildings step back further from the water. Beginning at 200 feet, the Public Realm Plan establishes the areas for which Planned Development Area (PDA) designations are permitted. The base height limit in these areas is 150 feet, although higher heights are possible with PDA designation. Figure 8-1 compares the heights of the Public Realm Plan and the Municipal Harbor Plan. As shown, the Municipal Harbor Plan increases the no-build zone from 30 to 140 feet. At 140 feet, building heights may be up to 175 feet, then, as the buildings step back from the water, heights may rise to 100, 200, 250 and 275 feet, up to a maximum of 300 feet. In

addition, urban design guidelines for the Inner Harbor require buildings to include a street wall of 75 to 85 feet, and limit the size of tower elements to 25,000 square feet.

In the Wormwood area of the Fort Point Historic Subdistrict, the Public Realm Plan established new height zones that are consistent with agreements with the South Boston community. North of the greenway area, heights may rise to a maximum of 150 feet. South of the greenway, heights are limited to 100 feet, sloping downward as buildings approach the South Boston neighborhood. The Municipal Harbor Plan maintains this orientation, although the exact configuration varies somewhat in accordance with the new open space configuration. See Figure 8-1.

8.7.2 The Regulatory Height Requirement

The Waterways Regulations prescribe strict height limitations. Within 100 feet of a project shoreline, heights of buildings for nonwater-dependent use must not exceed 55 feet. For each foot that this distance increases beyond 100 feet, the building's height may increase by one-half foot. The DEP will waive this numerical requirement if the project conforms to an approved Municipal Harbor Plan which specifies alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith, as appropriate for the harbor in question.

8.7.3 General Provisions Relating to Height Substitutions

We believe that strict application of the Chapter 91 heights to the South Boston Waterfront area will produce new development that will not be as effective at increasing public accessibility and activity as would a more flexible approach to height. Under certain conditions, height in excess of Chapter 91 limitations is preferable to the Chapter 91 alternative from density, urban design and public use perspectives. Project proponents are encouraged to be creative with building heights, including low, medium and relatively tall building elements in their project designs. By permitting a portion of a project to rise above Chapter 91 heights, even significantly, blocks can become smaller, and buildings can become slimmer, creating a series of view corridors that will help to draw people to the water's edge. Varying heights also will add visual interest to the South Boston Waterfront.

We are mindful, however, that height, otherwise beneficial, also can have negative impact on the ground level environment, particularly with respect to massing, wind and shadow impacts. In order to evaluate any negative impacts on the ground level environment that result from height substitutions, the BRA has analyzed representative Chapter 91 and Municipal Harbor Plan build-outs. To the extent relevant, we have also assumed a build-out for adjacent properties that is consistent with the Public Realm Plan. Summaries of these analyses are included below. A detailed discussion of impacts on a property by property basis is included in each subdistrict chapter.

The massing, wind and shadow analyses we have conducted allow us to evaluate the impacts of substitute height provisions so that we can ensure that ground level pedestrian conditions remain conducive to water-dependent activity and public access. By identifying the massing, wind and shadow impacts of a representative build-out under the Municipal Harbor Plan height substitutions, and the extent to which they exceed the impacts of a Chapter 91 build scenario, we are able to ensure that any negative impacts to the ground level environment are offset by appropriate measures that will encourage water-dependent uses and public access.

Summary of Massing Analysis and Impacts. Figure 8-4 depicts the Chapter 91 heights for the South Boston Waterfront MHP Area and Figure 8-5 depicts the Municipal Harbor Plan heights for the area. Hypothetical build-outs under Chapter 91 for Fan Pier, Pier 4 and Children's Wharf are shown in Figure 8-6, and for the Wormwood Area in Figure 8-7. The Chapter 91 build-outs are hypothetical build-out scenarios based solely on the Waterways Regulations. The Chapter 91 build-outs comply with height, open space, setback and use requirements of the Waterways Regulations. They do not take into account the principles of the Public Realm Plan, such as the Urban Design Guidelines, or principles developed in this Municipal Harbor Plan, such as limiting tower elements to 25,000 square feet and requiring street walls. In contrast, the Municipal Harbor Plan build-outs, shown in Figures 8-8 and 8-9, take into account the planning principles of the Public Realm Plan, and the measures developed in this Municipal Harbor Plan to implement the Public Realm Plan.

As Figures 8-6, 8-7, 8-8 and 8-9 demonstrate, generally the Chapter 91 build-outs, while lower in height, create massive blocks. Although the buildings step back from the water, in accordance with the requirements of the Waterways Regulations, they also create a wall along the street side that blocks views of the water. The purpose of the massing criteria, such as the requirement of a street wall and the limit on tower floorplates, is to create slimmer towers that are set back from the edge of the sidewalk and minimize the impact on the pedestrian level environment.

Summary of Wind Analysis and Impacts. The BRA engaged Frank H. Durgin, P.E., to conduct a qualitative wind study for the South Boston Waterfront District (Durgin Wind Study). The objective of the Durgin Wind Study was to examine and compare the effects of representative build-outs of the Chapter 91 and Municipal Harbor Plan on pedestrian-level winds along the Harborwalk and major public open spaces. The Durgin Wind Study is included in Appendix 4.

Durgin Wind Study. Wind impacts are typically summarized in terms of Melbourne criteria. In 1978, W.H. Melbourne developed probabilistic criteria for average and peak pedestrian level winds which accounted for different types of pedestrian activity as well as the safety aspects of such winds. Five categories of pedestrian level winds are defined:

- 1) Comfortable for Long Periods of Standing or Sitting;
- 2) Comfortable for Short Periods of Standing or Sitting;
- 3) Comfortable for Walking;
- 4) Uncomfortable for Walking; and
- 5) Dangerous and Unacceptable.

These criteria are not absolute (any location can have dangerous winds in a major storm or hurricane). Rather, they imply that the location would have wind speeds such that the activity suggested is possible most of the time, and would be perceived as such by most people who frequent the location.

Mr. Durgin has reinterpreted the Melbourne criteria to apply to equivalent average winds. The equivalent average is similar to the hourly average used by Melbourne, but combines the effects of steady and gusting winds. The Melbourne criteria, expressed in terms of equivalent average, are shown graphically in Figure 12 of the Durgin Wind Study.

Building shape and the location and configuration of entrances both affect pedestrian winds and pedestrian traffic near a building. We have, however, only basic building massings and heights. Thus any discussion of pedestrian winds close to any of the representative buildings is premature, and must be left to the project review stage. However, where there are groups of buildings, their exact shape is not as important as their massing and height in terms of how they will affect pedestrian winds on the adjacent Harborwalk and adjacent open spaces.

Winds in Boston come primarily from the northwest, west and southwest. Figures 7-10 of the Durgin Wind Study show pedestrian level wind roses for Boston in winter, spring, summer and fall. These figures show that northwest winds tend to occur during the colder months and southwest winds during the warmer months. Spring and fall are transitional, but winds are stronger in the spring than in the fall. Strong easterly winds usually occur during storms when there is precipitation.

For the most part, the weather in New England is dominated by either large coastal storms (fall, winter and spring) or the Bermuda High (summer). Typically, when a coastal storm occurs, it rains or snows for 4 to 12 hours, then it clears, and, as the storm moves to the northeast, the winds blow from the northwest for three or four days until the next weather system arrives. These storms and the northwest winds following them occur mostly in the fall, winter and spring. Northwest winds are particularly uncomfortable in the winter, when typically they occur on cold days. The Bermuda High is generally responsible for the southwest winds that occur in the summer.

The Durgin Wind Study compared pedestrian level winds at 26 locations along Harborwalk and in public open spaces for northwest, southwest, northeast, east and southeast winds for a total of 130 coordinates (combination of one wind direction and one



Figure 8-4 Chapter 91 Height Diagram

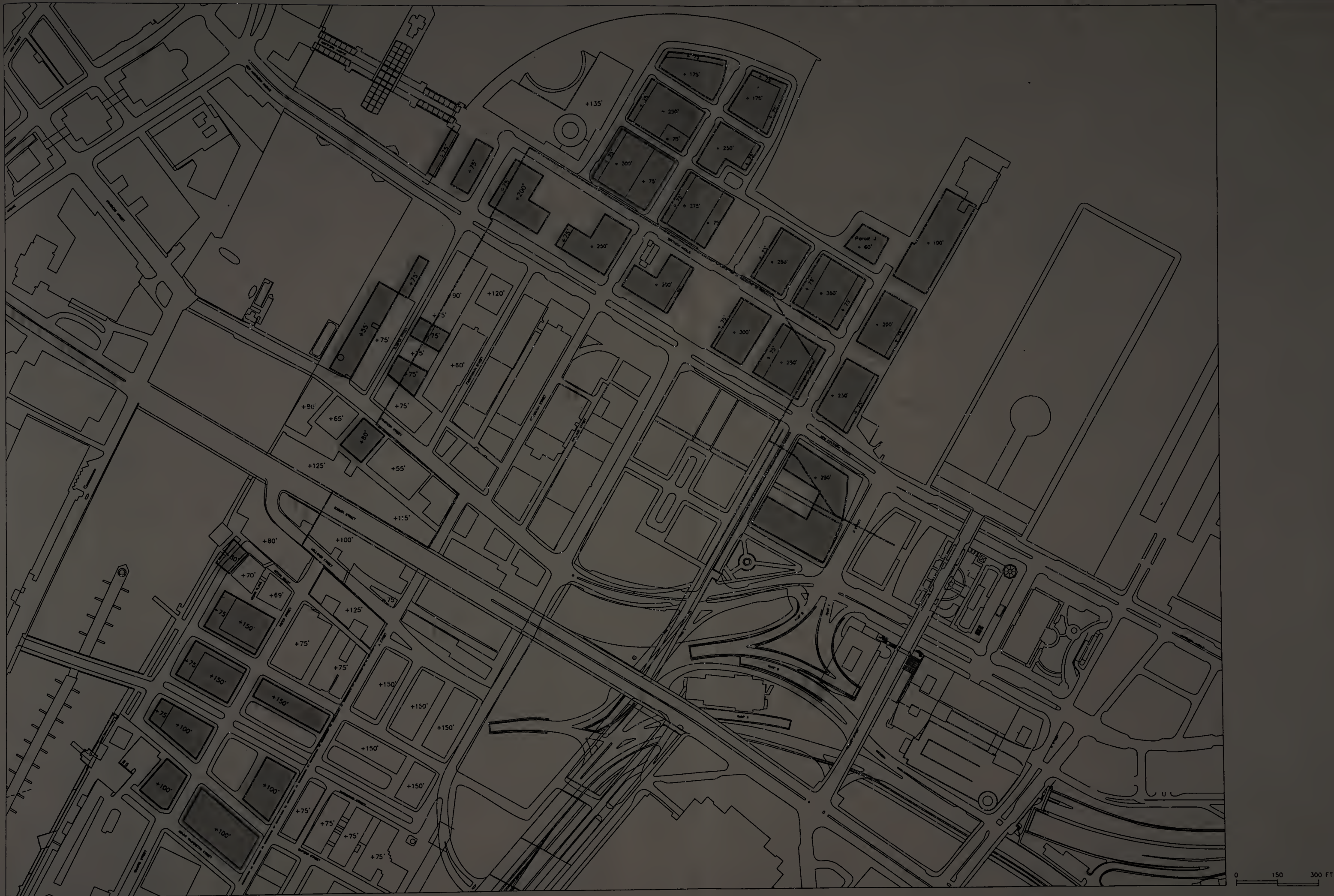


Figure 8-5 Municipal Harbor Plan Height Diagram





Figure 8-6 Chapter 91 Build Condition: Inner Harbor MHP Area and Children's Wharf



Figure 8-7 Chapter 91 Build Condition: Wormwood Area



Figure 8-8 Municipal Harbor Plan Build Condition: Inner Harbor MHP Area and Children's Wharf



Figure 8-9 Municipal Harbor Plan Build Condition: Wormwood Area

location). In 104 of the coordinates, there was no change in pedestrian level winds from the Chapter 91 build-out to the MHP build-out. The MHP build-out is expected to result in increased pedestrian level winds at 20 coordinates, and reduced winds at 6 coordinates. A detailed analysis of the wind impacts of the two build-outs is discussed for each parcel for which a height substitution is included in the appropriate subdistrict chapter.

Pedestrian level winds are predicted to be relatively mild under both the Chapter 91 build and MHP build scenarios. For the most part, pedestrian level winds are predicted to be Category 1 (Comfortable for Long Periods of Sitting and Standing) and Category 2 (Comfortable for Short Periods of Sitting and Standing) throughout the waterfront area for both the Chapter 91 and MHP build-out conditions. For the MHP build scenario, pedestrian level wind are predicted to be Category 1 at approximately 41% of the coordinates, Category 2 at approximately 36% of the coordinates and Category 3 at approximately 20% of the coordinates. The worst wind conditions are predicted to occur when the wind is blowing from the northeast, the most common of the storm winds. For northeast winds, for much of the waterfront area, under no build, Chapter 91 build and MHP build conditions, pedestrian level winds are predicted to be Category 4 (Uncomfortable for Walking). All of the Category 4 winds are predicted to occur during northeast and easterly (storm) winds, when it is unlikely that people will want to be on the Harborwalk.

BRA Municipal Harbor Plan Wind Standard. We used the Durgin Wind Study as a basis for developing a maximum not-to-exceed standard for pedestrian level winds in the MHP Area, as requested by the Secretary's Scope. Boston's naturally windy climate is even more so along its waterfront area. Because of the orientation of the Harbor, it is most vulnerable to northeast and easterly winds, both of which occur primarily during storms. For northeast winds, at 16 out of 26 coordinates, pedestrian level winds are expected to be Category 4. Moreover, there is little difference between the no build, Chapter 91 build and MHP build conditions.

Based upon Boston's naturally gusty wind conditions, the data from the Durgin Wind Study, the BRA's wind speed guideline and our own experience applying the guideline to Boston's windy climate, we have determined that the appropriate maximum-not-to-exceed standard is to prohibit Category 5 (Dangerous and Unacceptable) at any location in the MHP Area. Experience with the BRA effective gust wind speed guideline has shown us that, given the windy conditions on Boston's waterfront, a certain amount of flexibility will be required if we use anything less than Category 5 as a standard. Because we are establishing a maximum-not-to-exceed standard, Category 5 is appropriate.

During the Article 80 review process, projects that are required to complete analyses of pedestrian level winds will still be tested against the BRA's effective gust wind speed guideline. For projects that cause ground-level ambient speeds to exceed the Article 80 pedestrian wind guidelines, through the flexibility of the Article 80 process, measures designed to mitigate wind impacts will be adopted. But in no event may any proposed project result in Category 5 pedestrian level winds.

Offsets for Wind Impacts. Our review of predicted pedestrian level winds under existing, Chapter 91 and MHP build conditions has shown us that the Chapter 91 and MHP build-outs are expected to cause a marked improvement in pedestrian level winds throughout the South Boston Waterfront. In addition, there are few instances when the MHP build-out is expected to result in increased pedestrian level winds over the Chapter 91 build condition (approximately 15% of the coordinates). Finally, at the vast majority of coordinates, pedestrian level winds are predicted to be in Melbourne Category 1 and Category 2. Under these circumstances, we believe that the most useful approach with respect to wind impacts is to focus our attention on mitigation measures. We have also incorporated offsets for wind impacts into the performance standards developed for shadow impacts, as discussed in greater detail below and in Section 10.2.3.

Summary of Shadow Analysis and Impacts. Important dates in understanding sun access are the summer and winter solstices (June 21 and December 21), and the spring and autumn equinoxes (March 21 and September 21). An analysis of June 21 can be useful for understanding what type of sun access is provided on a summer day. June 21, however, receives more sun access than any other day of the year and, therefore, is not useful for setting shadow standards as every other day of the year will receive less sun access and greater shadows. As the shortest day of the year, December 21 is not useful for setting standards because the sun is located at such an angle as to cast large shadows for any structure, including low-rise buildings.

In a climate such as Boston's, sun access is most important in the shoulder seasons of spring and fall, when radiation from the sun is capable of compensating for cool air temperatures. One could consider basing sun/shadow standards on either the spring or autumn equinox (March 21 or September 21). Sun/shadow impacts will be the exact same on either of these days, with a one-hour difference resulting from the fact that March 21 is in Eastern Standard Time and September 21 is in Eastern Daylight Time. Autumn, however, is when Boston is at its best, and September 21 is really only the beginning of the season. We believe it is more appropriate to base sun/shadow standards at the end of what are traditionally considered the "outdoor months", when people often are seeking opportunities to spend time out-of-doors, before the weather turns colder. For these reasons, the City has consistently used October 23 as the appropriate date to study shadow impacts and as a base for establishing shadow standards, a traditional practice that we continue with this Municipal Harbor Plan.

In evaluating the effects of substitute height provisions on shadow, our first step was to identify those areas of the Inner Harbor and Fort Point Historic subdistricts that will be particularly important to protect from excessive shadow impacts, and designate these areas as shadow protection zones. See Figures 10-3 and 10-7. Generally, the shadow protection zone includes Harborwalk, portions of parcels that front along the water, and portions of the watershed. Our second step was to study the shadow impacts on the shadow protection zone of the representative Chapter 91 and Municipal Harbor Plan build-outs. Although we studied shadow effects from 9 a.m. to 5 p.m. for six dates during the year,

March 21, May 5, June 21, September 21, October 23 and December 21, as stated above, our focus was October 23. The Chapter 91 shadow impacts formed the baseline for a comparative analysis of the impacts of the MHP build scenario.

Summary of Shadow Impacts. Figures 8-10 and 8-11 depict the shadow cast by the MHP build scenario on October 23 for the Inner Harbor MHP Area, the Fort Point Channel MHP Area and the Wormwood MHP Area.

At 9:00 and 10:00 a.m., the sun is relatively low in the sky, and long shadows are cast. In the Inner Harbor, shadows stretch to Courthouse Park and beyond while the proposed Tidal Park at the Fan Pier, Pier 4 Park, defined in this Municipal Harbor Plan at the northern end of the pier, and the majority of the Fan Pier Cove remain free from any shadow impacts. The proposed public green at the Fan Pier remains largely in shadow. At 11:00 a.m. and 12:00 p.m., shadows begin to move into the fan edge and the southern portion of the cove. Pier 4 Park remains largely free from shadow. At 1:00 p.m. and 2:00 p.m., shadows begin to cover much of the fan edge. Also, approximately one-half of the cove and Pier 4 Park areas are in shadow. The public green, however, is largely free from shadow at this time. At 3:00 p.m., the fan edge is almost completely in shadow, as is more than one-half the cove. Approximately one-half of Pier 4 Park is in shadow, while the public green remains largely free from shadow impacts. Shadows are beginning to be cast on the watersheet between Pier 4 and Commonwealth Pier. By 4:00 and 5:00 p.m., as the sun is going down, long shadows are cast throughout the area leaving much of the site in shadow, except for the eastern portion of the fan edge. With the exception of late in the day (from 4:00 p.m. on), some portion of the shadow protection zone remains in sunlight. When the fan edge and Pier 4 Park are in sunlight during the morning hours, the public green is shaded. When the fan edge is in shadow beginning in the late morning/early afternoon, Pier 4 remains in sunlight. As the fan edge becomes more shaded, and Pier 4 Park also becomes shaded, the public green is largely in sunlight.

Along Fort Point Channel, at 9:00 a.m., much of the Harborwalk and immediately adjacent watersheet is in shadow, as well as a portion of the MBTA's Mitigation Park. . By 10:00 a.m., the watersheet is largely free from shadow impacts. From 11:00 a.m. on, the watersheet and Harborwalk are largely free from any shadow impacts. By noon, the majority of Mitigation Park also is in sunlight. For the remainder of the day, as the sun continues to move through the site, the vast majority of the shadows cast are on existing buildings. Beginning at 2:00 p.m., the Barking Crab starts to cast shadows on the pedestrian space behind it, and continues to do so for the remainder of the afternoon. For the most part, with the exception of the earlier morning hours, most of the shadow protection zone areas along Fort Point Channel are in sunlight most of the day.

In the Wormwood area, at 9:00 and 10:00 a.m., shadows are cast into the Fort Point Channel itself. Also, the major interior park space proposed for this area is in shadow. By 11:00 a.m., the watersheet is largely free from shadow, and the interior park space is partly in sunlight, while Harborwalk remains largely in shadow. At noon, Harborwalk is mostly in sunlight, as is much of the interior park space. From 1:00 p.m. on, there is very little to

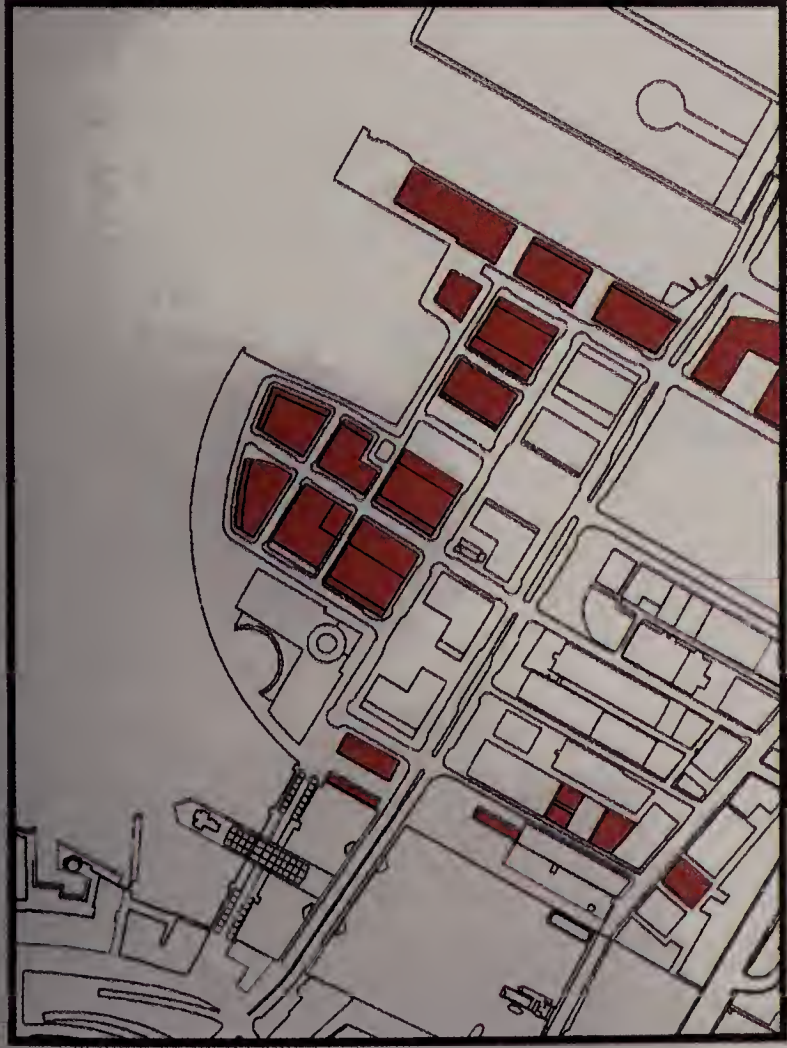
no shadow cast on Harborwalk. From noon until 2:00 p.m., the interior open spaces are more in sunlight than in shadow. Beginning at 3:00 p.m. and continuing until the sun sets, the interior open spaces are more in shadow than in sun. Except for the earlier morning hours, some portion of the shadow protection zone remains in sunlight throughout the day. At midday, both the Harborwalk and interior open spaces receive a great deal of sunlight. As the afternoon progresses, and the interior open spaces become shaded, Harborwalk is in full sunlight.

Comparative Shadow Analysis. After studying the shadow impacts for the entire area, we conducted a comparative analysis of the shadow impacts of the Chapter 91 buildout versus the MHP build-out. This analysis helped us to isolate the shadow impacts of the MHP build-out that are in excess of the impacts of the Chapter 91 build-out, or, what we call the “net new shadow”. For the purposes of offsetting shadow impacts, it is the net new shadow of MHP build-out that is relevant.

As we monitored shadow progression over the course of the day, we came to realize that shadows can be placed in two categories. First are the shadows that have a duration of one hour or less. These shadows move relatively quickly, and have relatively little impact on the site. Second are those shadows that are of longer duration and which cause areas to be consistently in shadow over the course of the day. Our greatest concern is the shadows of longer duration, as these can have a significant impact on the pedestrian environment. In order to focus on these areas, we have eliminated shadows of under one hour in our studies. We have also eliminated shadows cast by existing structures. Accordingly we focused our attention on those areas of the shadow protection zone that are in shadow more than one hour each day.

Given that the Municipal Harbor Plan build-out includes higher heights than the Chapter 91 build-out, it is no surprise that the Municipal Harbor Plan scenario has more significant shadow impacts than the Chapter 91 scenario. Figures 8-12 and 8-13 show the net new shadow throughout the district, not including shadows under one hour in duration. For the purposes of developing offsets for shadow impacts, we focused on the amount of net new shadow cast by our representative MHP build-out for each hour of the day from 9:00 a.m. to 5:00 p.m. The results of this analysis are shown below.

It should be noted that a comparison of the Chapter 91 and MHP build-out scenarios presents variables beyond building height. In particular, building location and massing, areas of building setback from the water, and location and configuration of open space areas. The comparison shows that we achieve greater concentrations of open space with the MHP build-out. For example, on the Fan Pier, the MHP build-out creates a public green on the cove that does not exist under the Chapter 91 build-out. The same is true in the Wormwood neighborhood. Because these new open spaces are located among development parcels, they necessarily are impacted by shadows cast by the buildings that will be constructed around these parcels. We believe it is important not to penalize property owners for providing new areas of open space. Therefore, for the purposes of requiring offsets for shadow impacts, we have eliminated from the impact analysis the



Key Map



October 23 9 am



October 23 10 am



October 23 11 am

Figure 8-10(1) October 23 Shadow for Inner Harbor MHP Area and Children's Wharf
Municipal Harbor Plan Build Condition



October 23 12 noon



October 23 1 pm

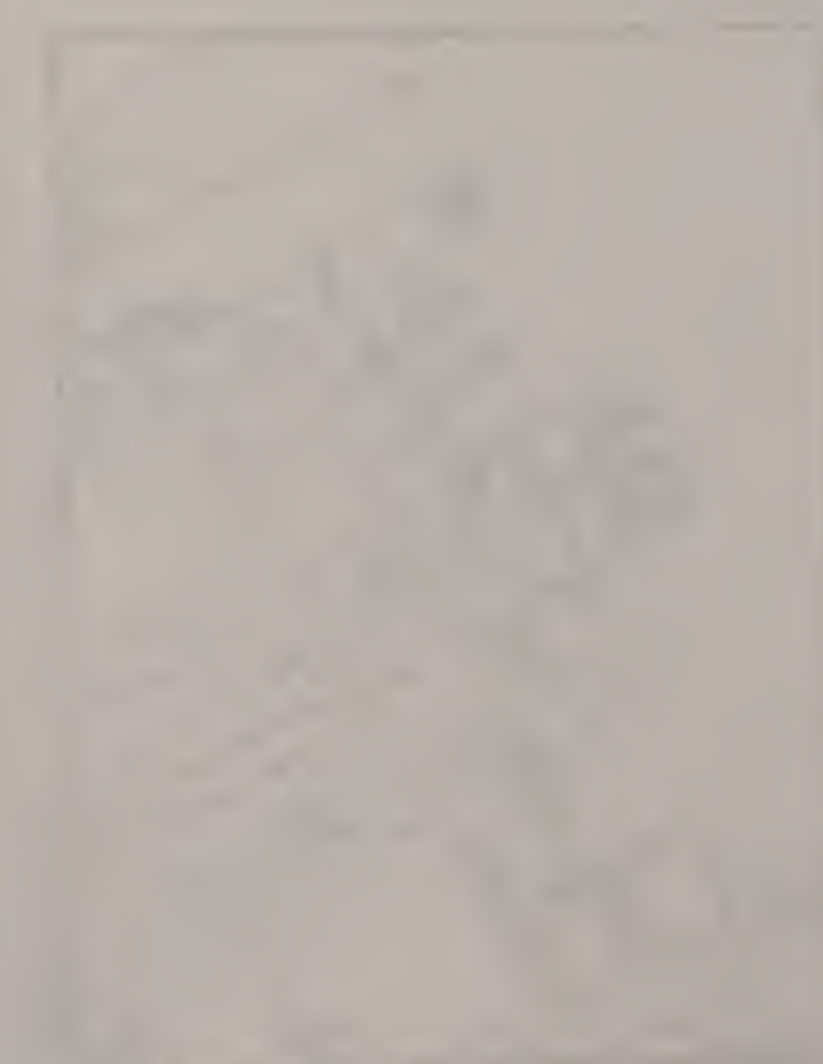
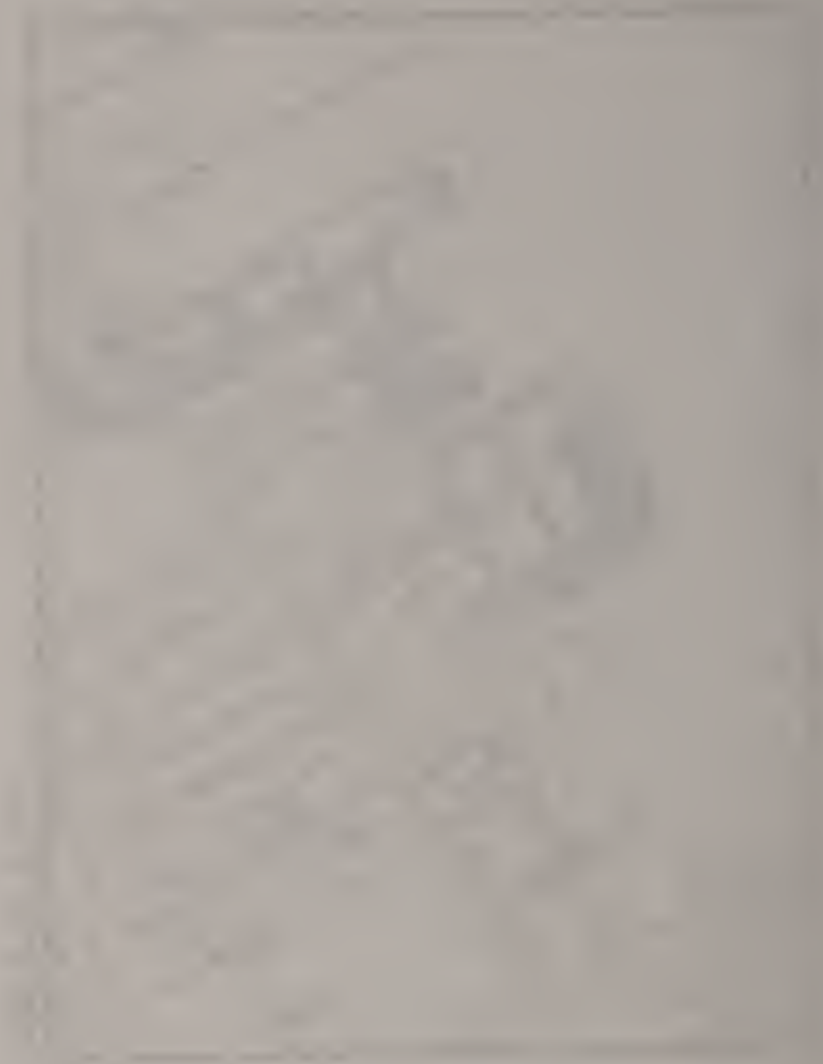


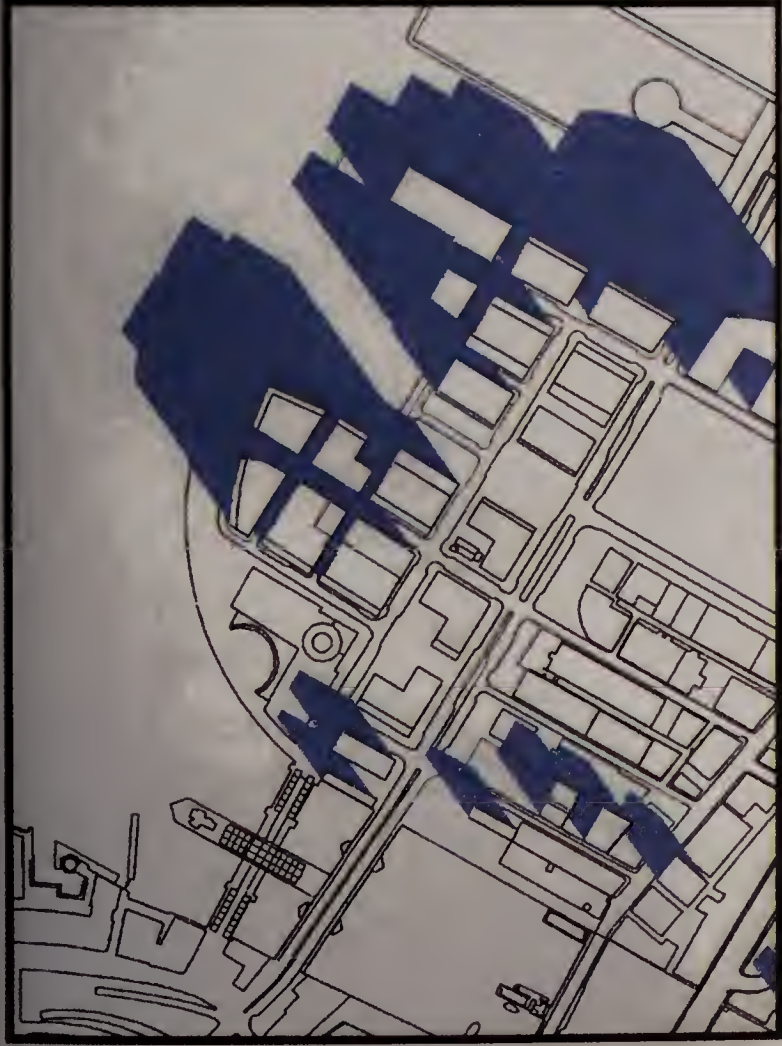
October 23 2 pm



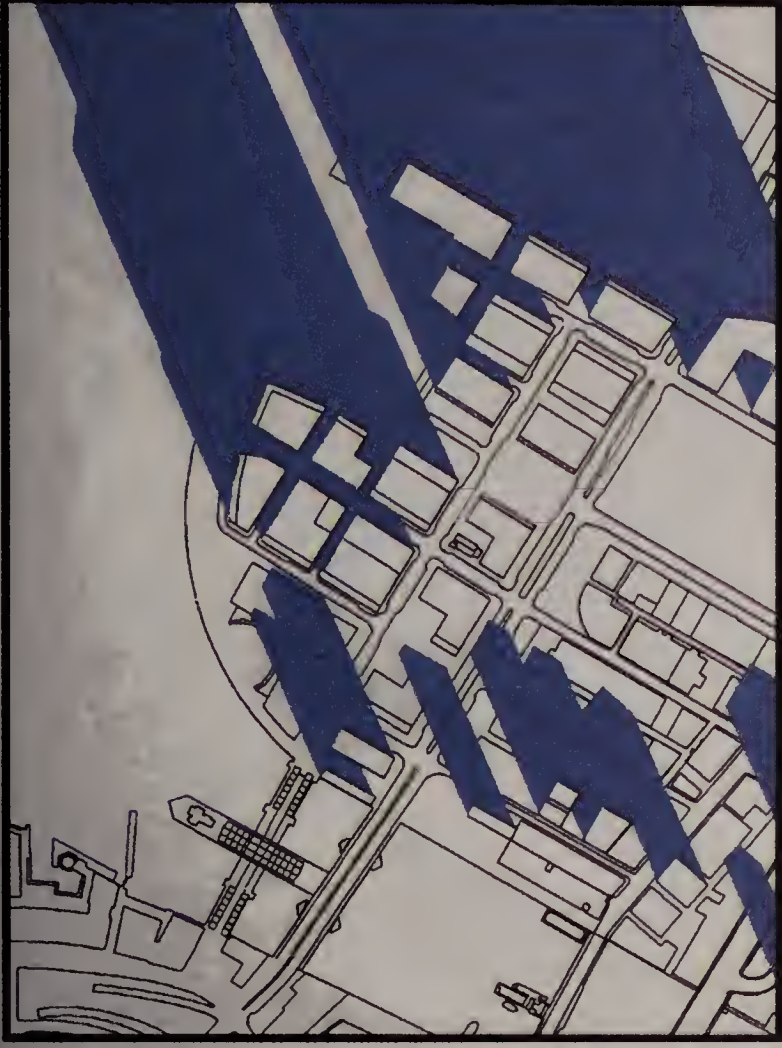
October 23 3 pm

Figure 8-10(2) October 23 Shadow for Inner Harbor MHP Area and Children's Wharf
Municipal Harbor Plan Build Condition



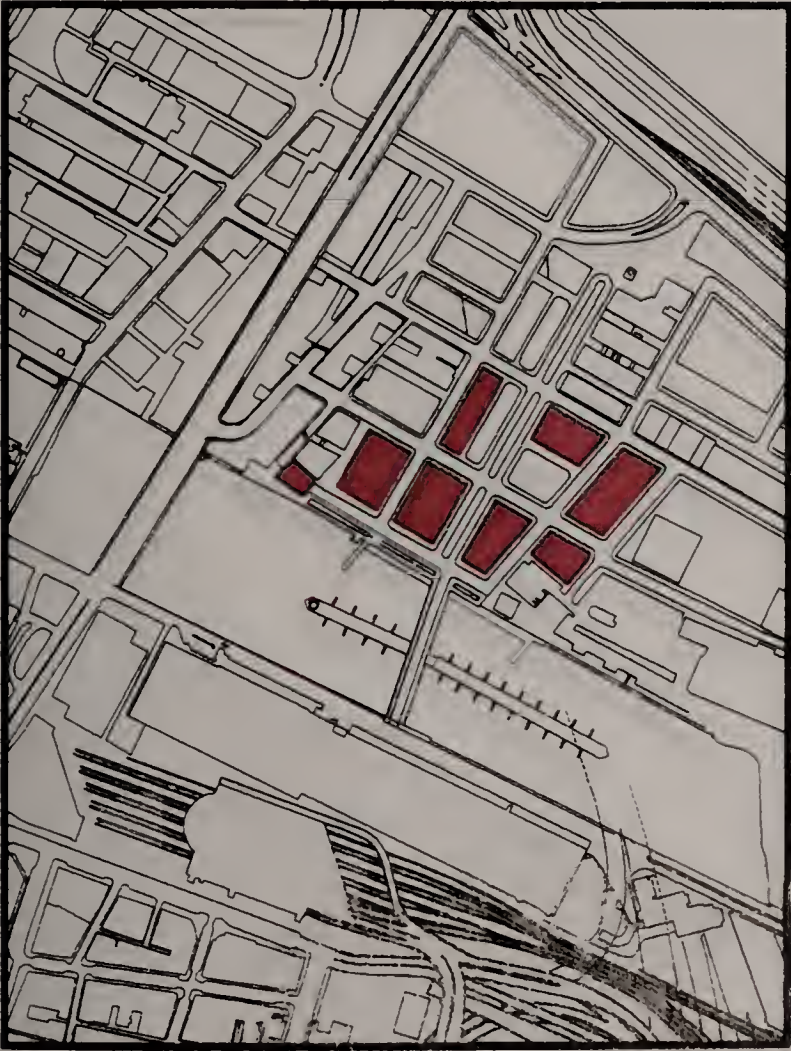


October 23 4 pm



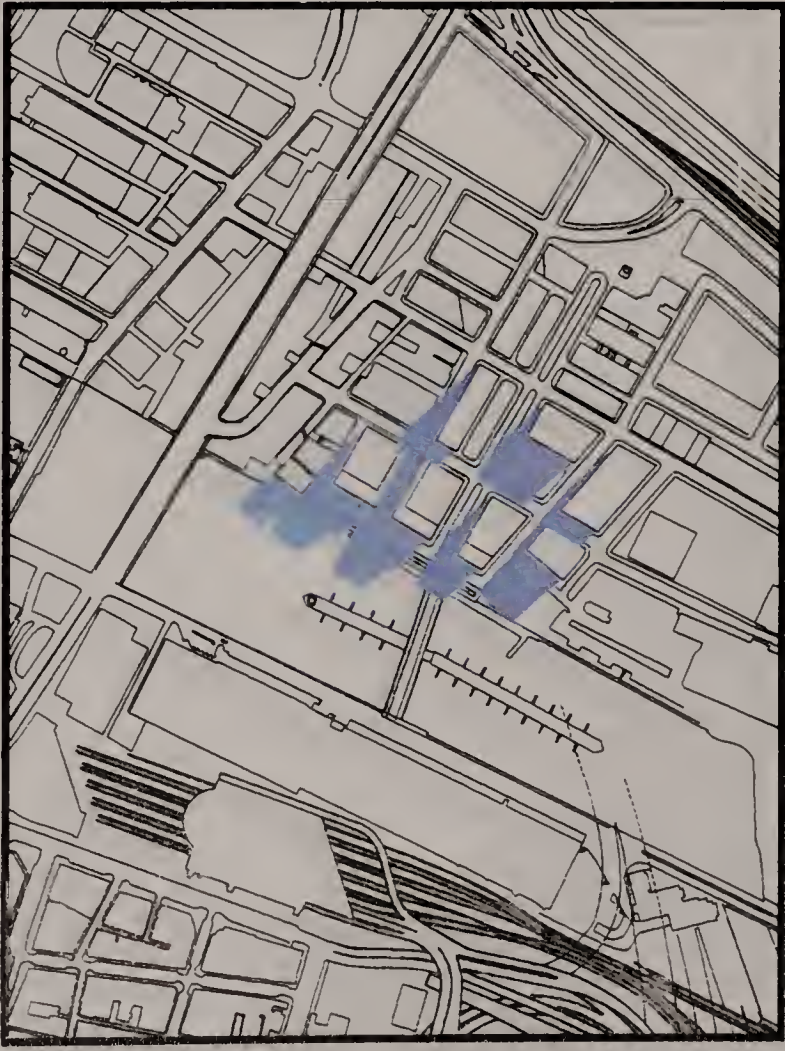
October 23 5 pm

**Figure 8-10(3) October 23 Shadow for Inner Harbor MHP Area and Children's Museum
Municipal Harbor Plan Build Condition**

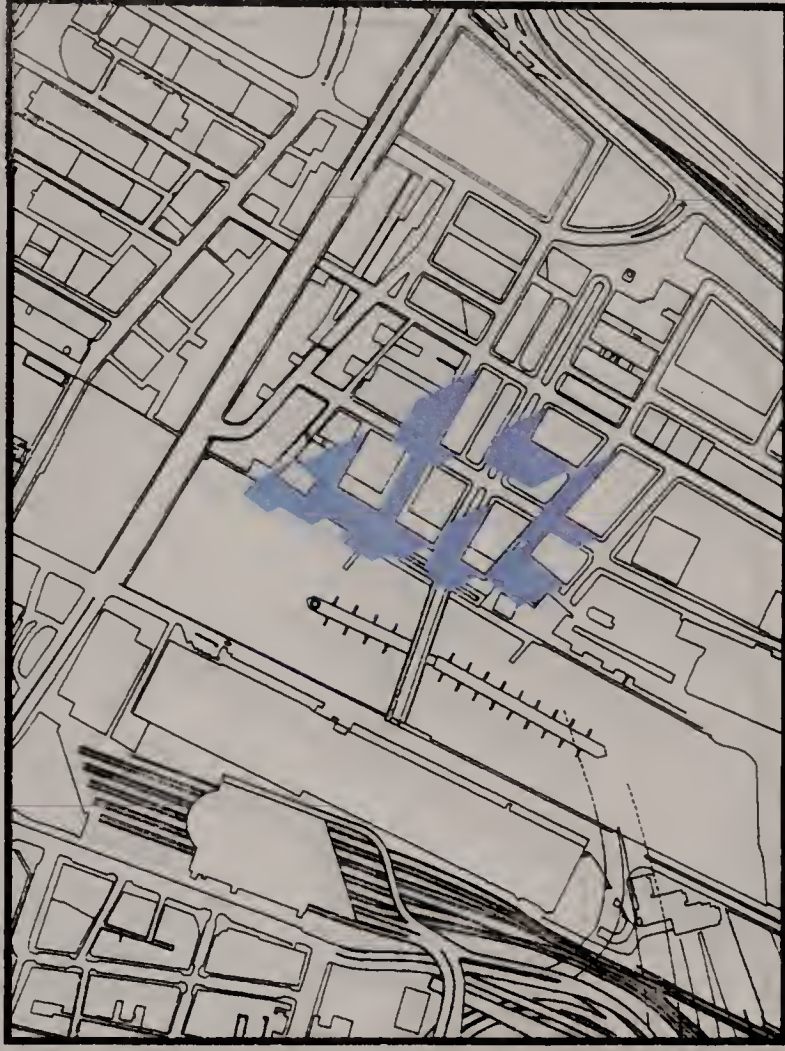


Key Map

October 23 9 am

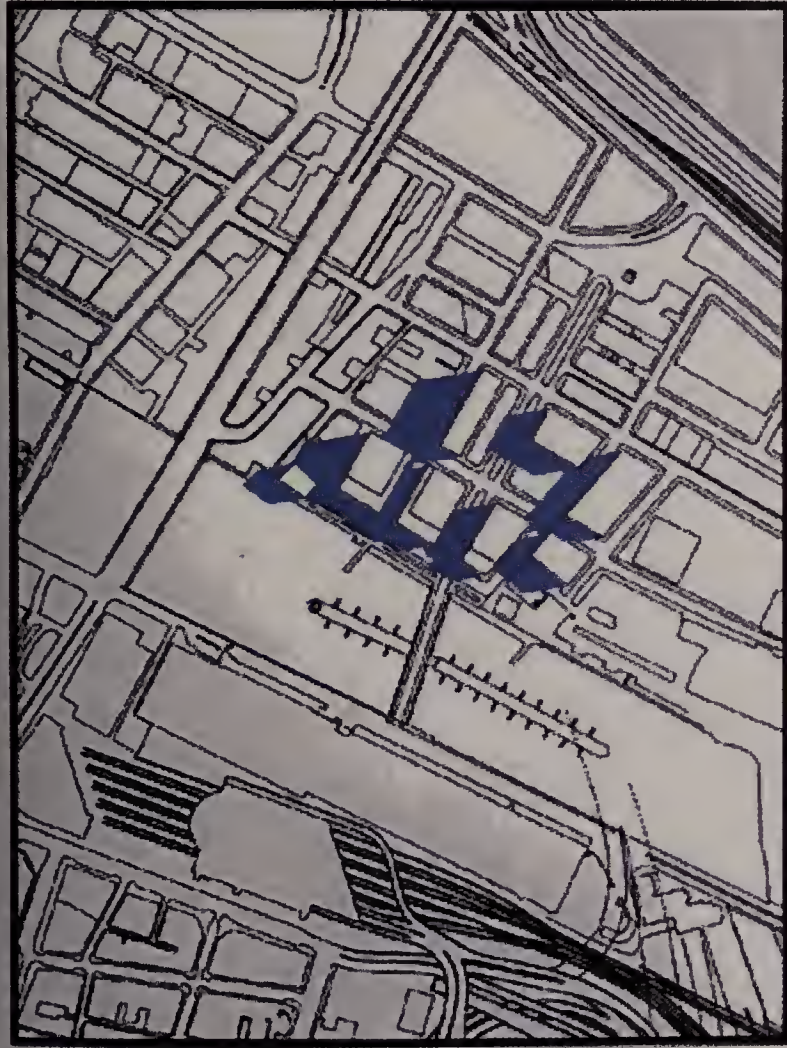


October 23 10 am



October 23 11 am

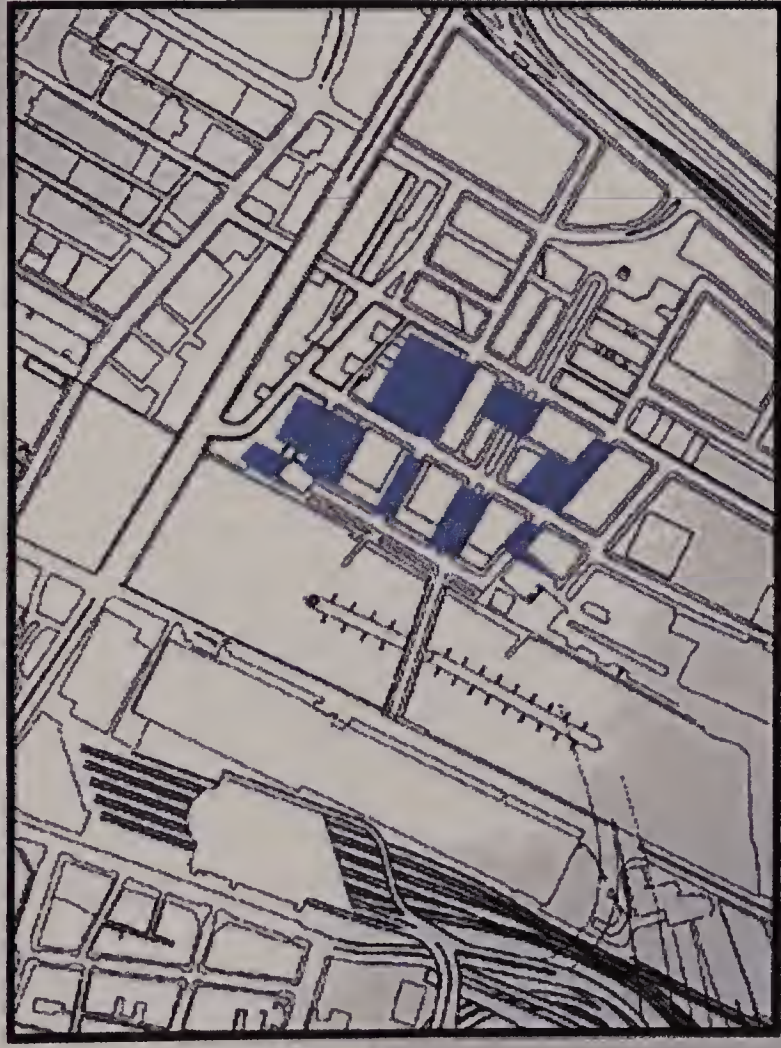
Figure 8-11(1) October 23 Shadow for Wormwood Area
Municipal Harbor Plan Build Condition



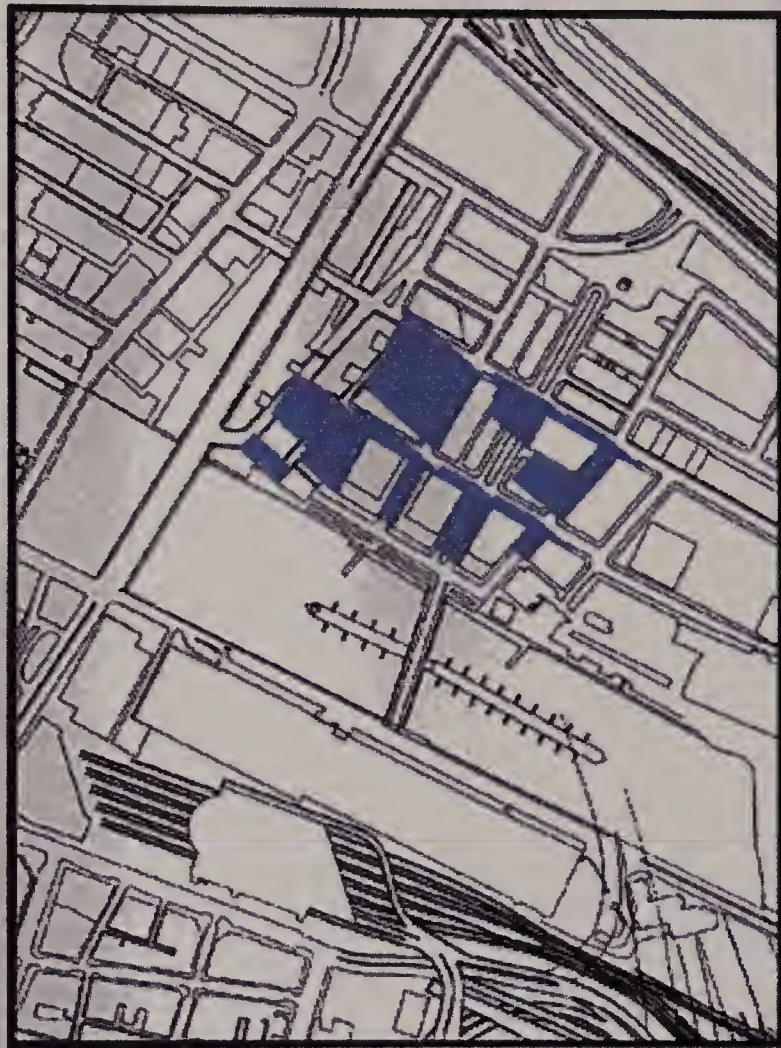
October 23 12 noon



October 23 1 pm

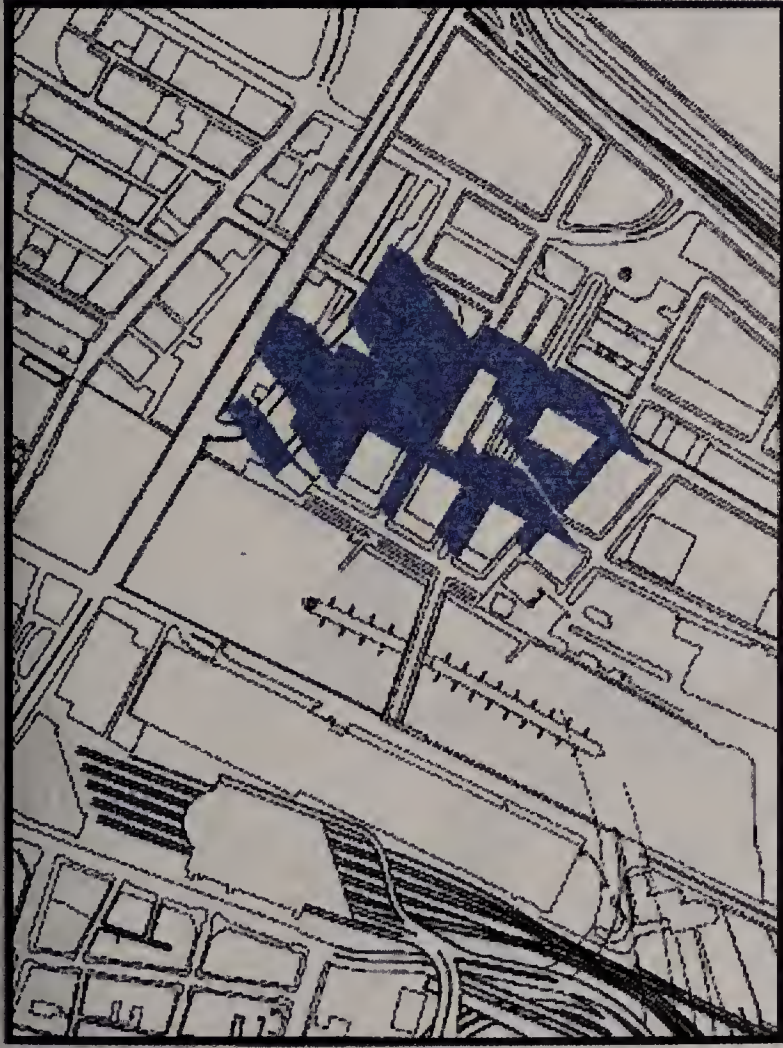


October 23 2 pm

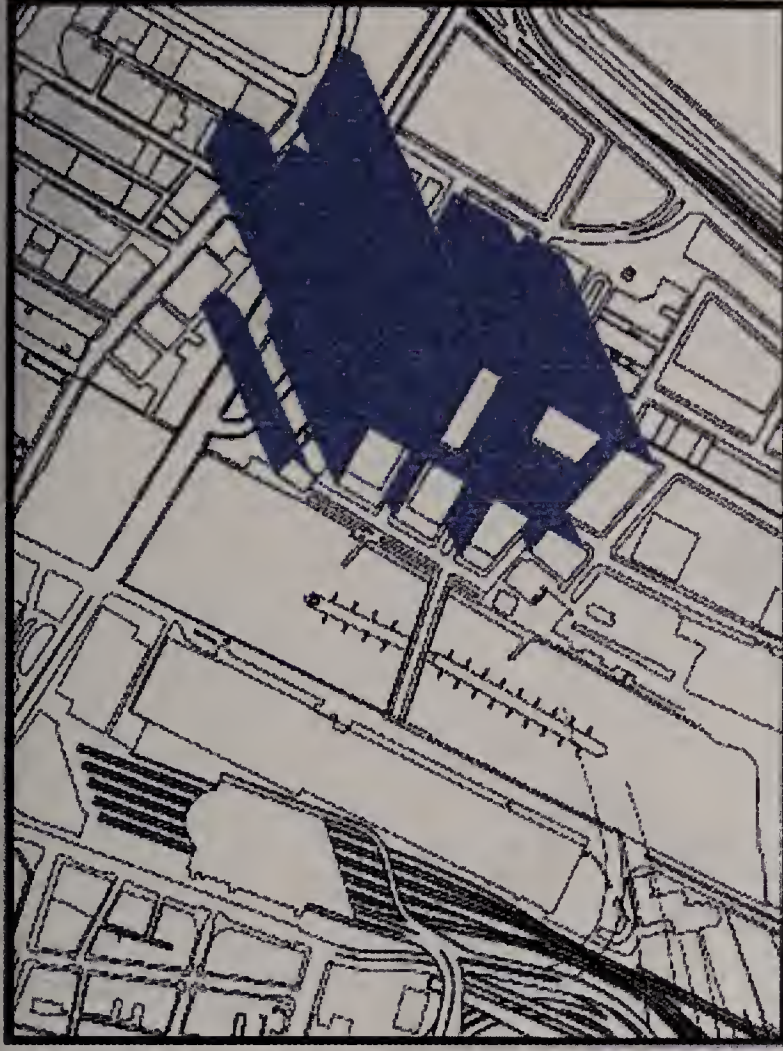


October 23 3 pm

**Figure 8-11(2) October 23 Shadow for Wormwood Area
Municipal Harbor Plan Build Condition**



October 23 4 pm



October 23 5 pm

**Figure 8-11(3) October 23 Shadow for Wormwood Area
Municipal Harbor Plan Build Condition**



Figure 8-12(1) Inner Harbor MHP Area and Children's Wharf
October 23 9 am Net New Shadow

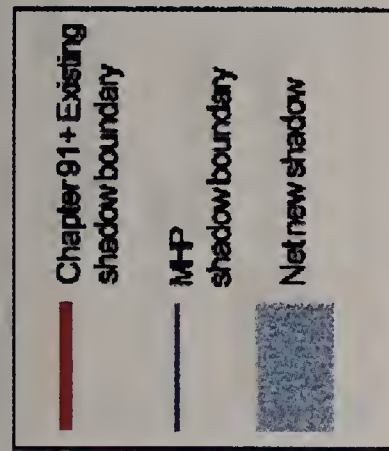


Figure 8-12(2) Inner Harbor MHP Area and Children's Wharf
October 23 10 am Net New Shadow



Figure 8-12(3) Inner Harbor MHP Area and Children's Wharf
October 23 11 am Net New Shadow



Figure 8-12(4) Inner Harbor MHP Area and Children's Wharf
October 23 12 noon Net New Shadow



Figure 8-12(5) Inner Harbor MHP Area and Children's Wharf
October 23 1 pm Net New Shadow

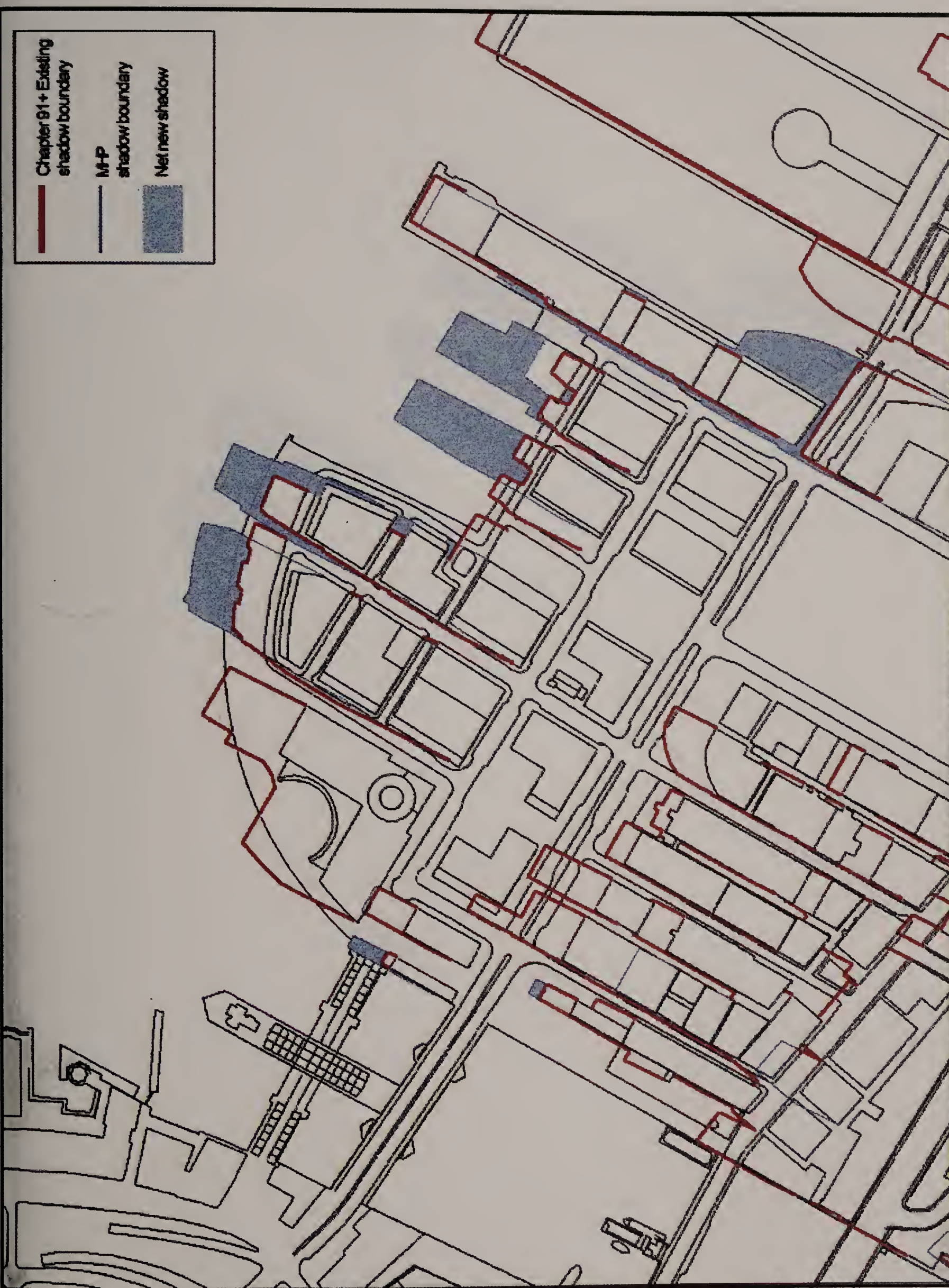


Figure 8-12(6) Inner Harbor MHP Area and Children's Wharf
October 23 2 pm Net New Shadow



Figure 8-12(7) Inner Harbor MHP Area and Children's Wharf
October 23 3 pm Net New Shadow



Figure 8-12(8) Inner Harbor MHP Area and Children's Wharf
October 23 4 pm Net New Shadow



Figure 8-12(9) Inner Harbor MHP Area and Children's Wharf
October 23 5 pm Net New Shadow

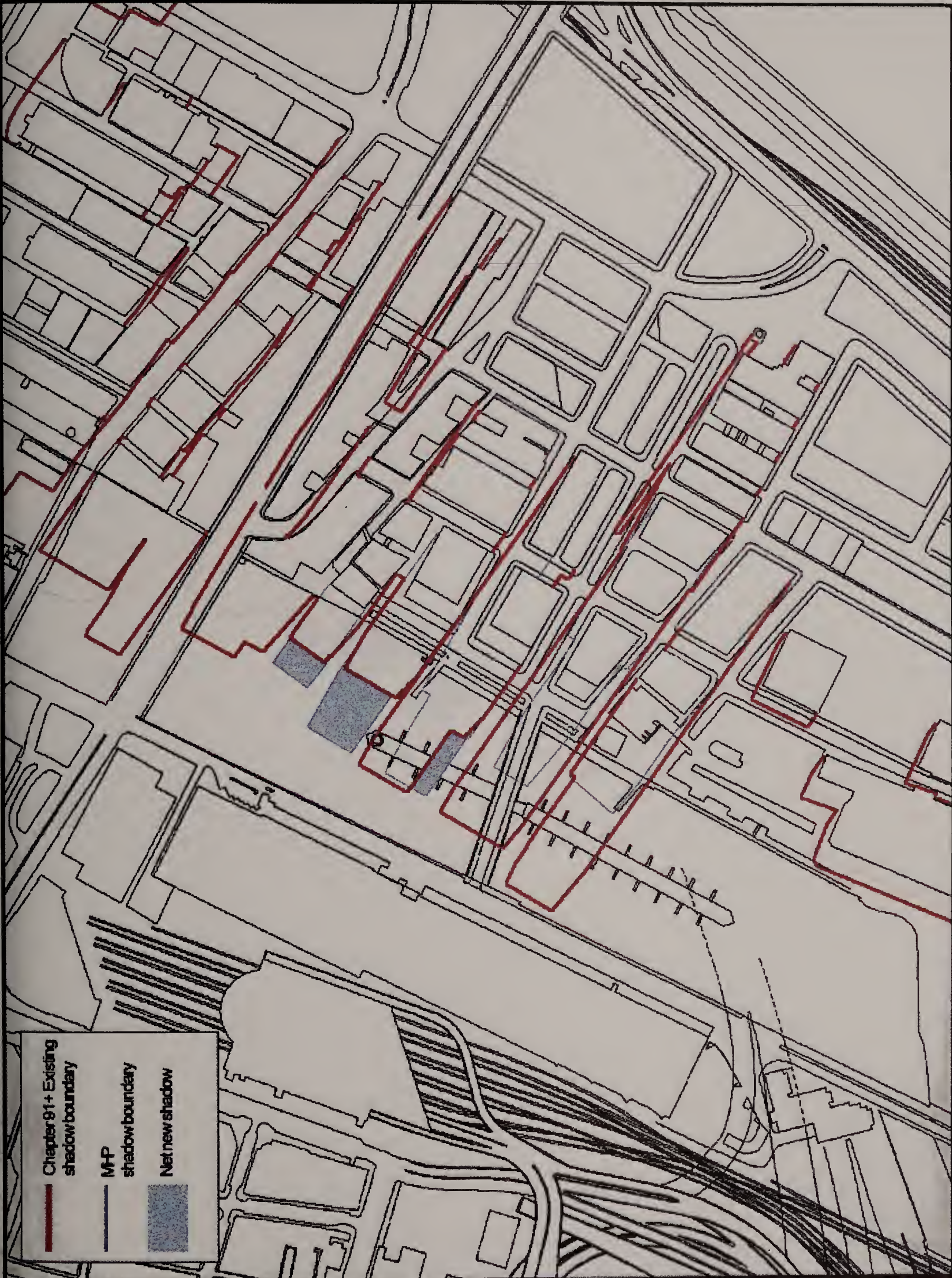
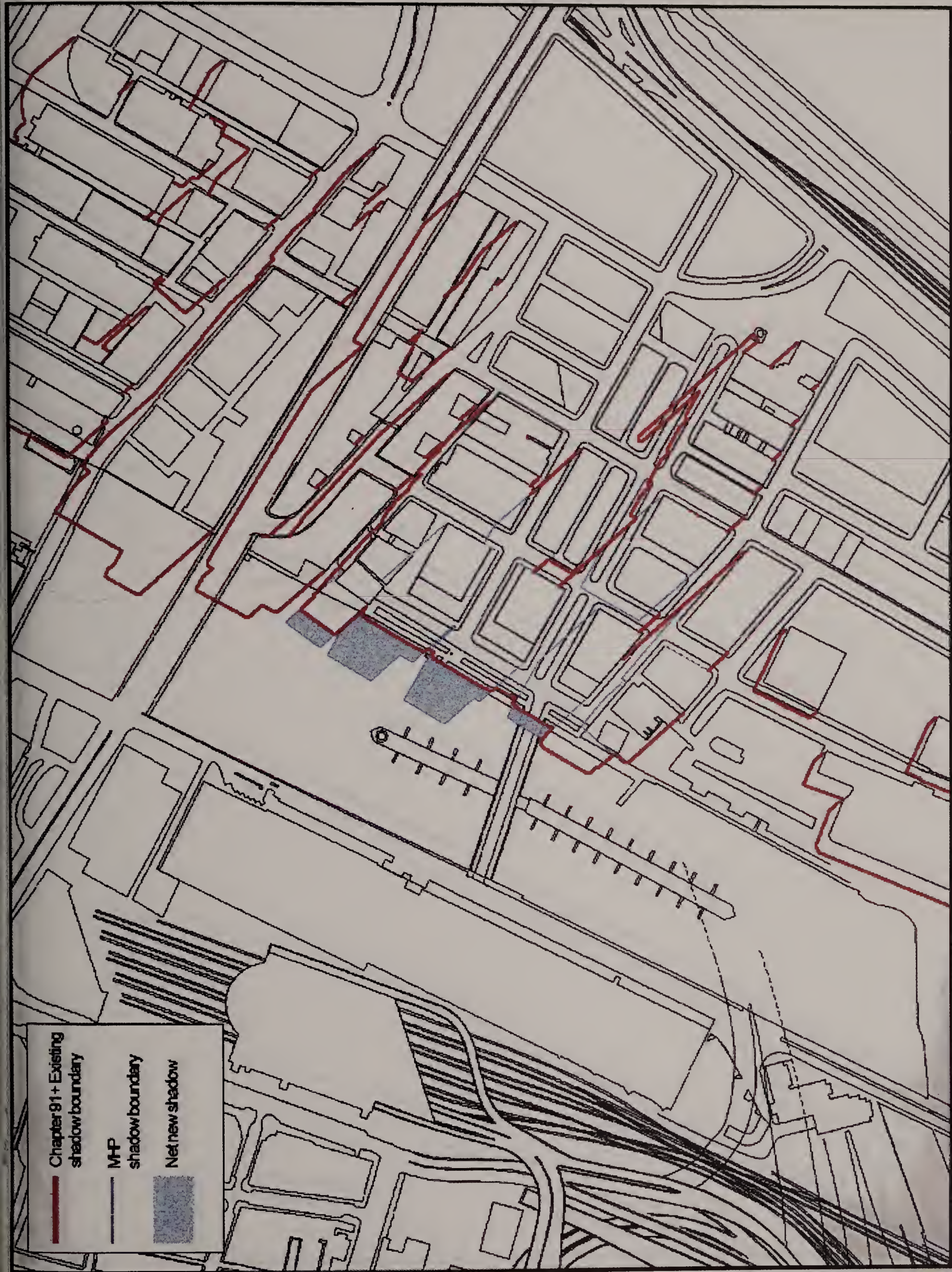


Figure 8-13(1) Wormwood Area
October 23 9 am Net New Shadow




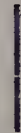

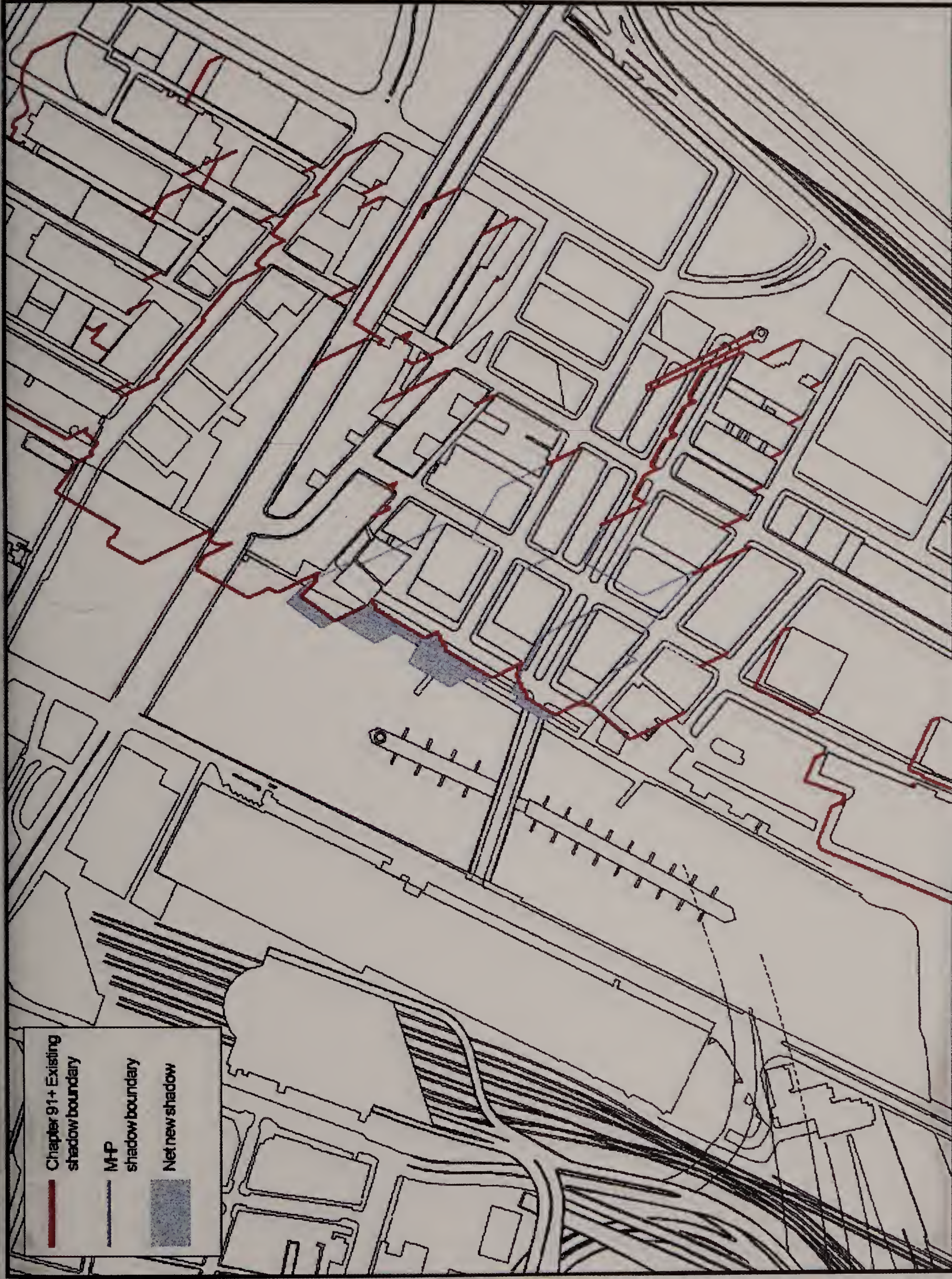
	Chapter 91+ Existing shadow boundary
	M-P shadow boundary
	Net new shadow

Figure 8-13(2) Wormwood Area
October 23 10 am Net New Shadow

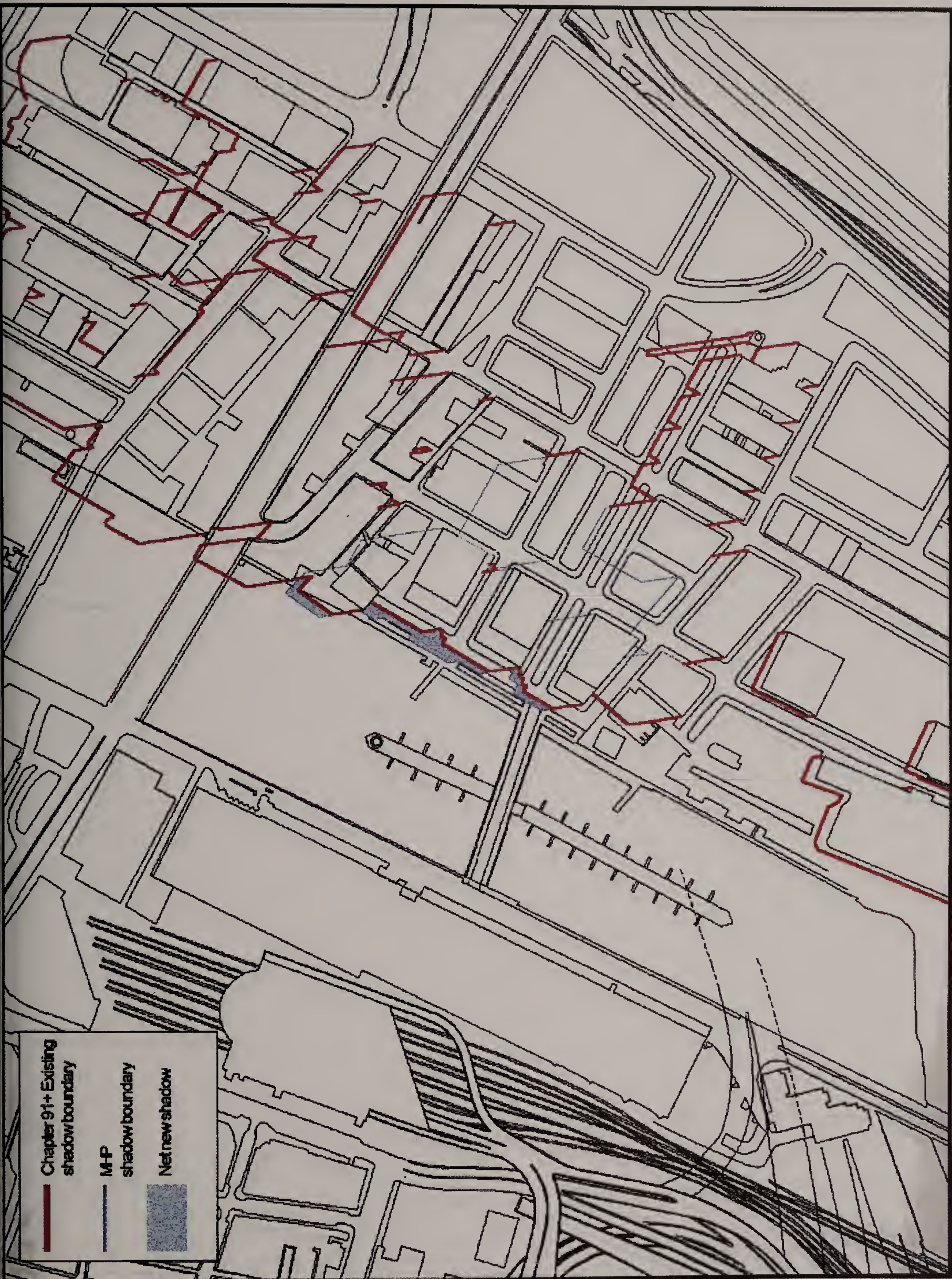


Chapter 91+ Existing
shadow boundary

M-P
shadow boundary

Net new shadow

Figure 8-13(3) Wormwood Area
October 23 11 am Net New Shadow



Chapter 91+ Existing
shadow boundary

M-P
shadow boundary

Net new shadow

Figure 8-13(4) Wormwood Area
October 23 12 noon Net New Shadow

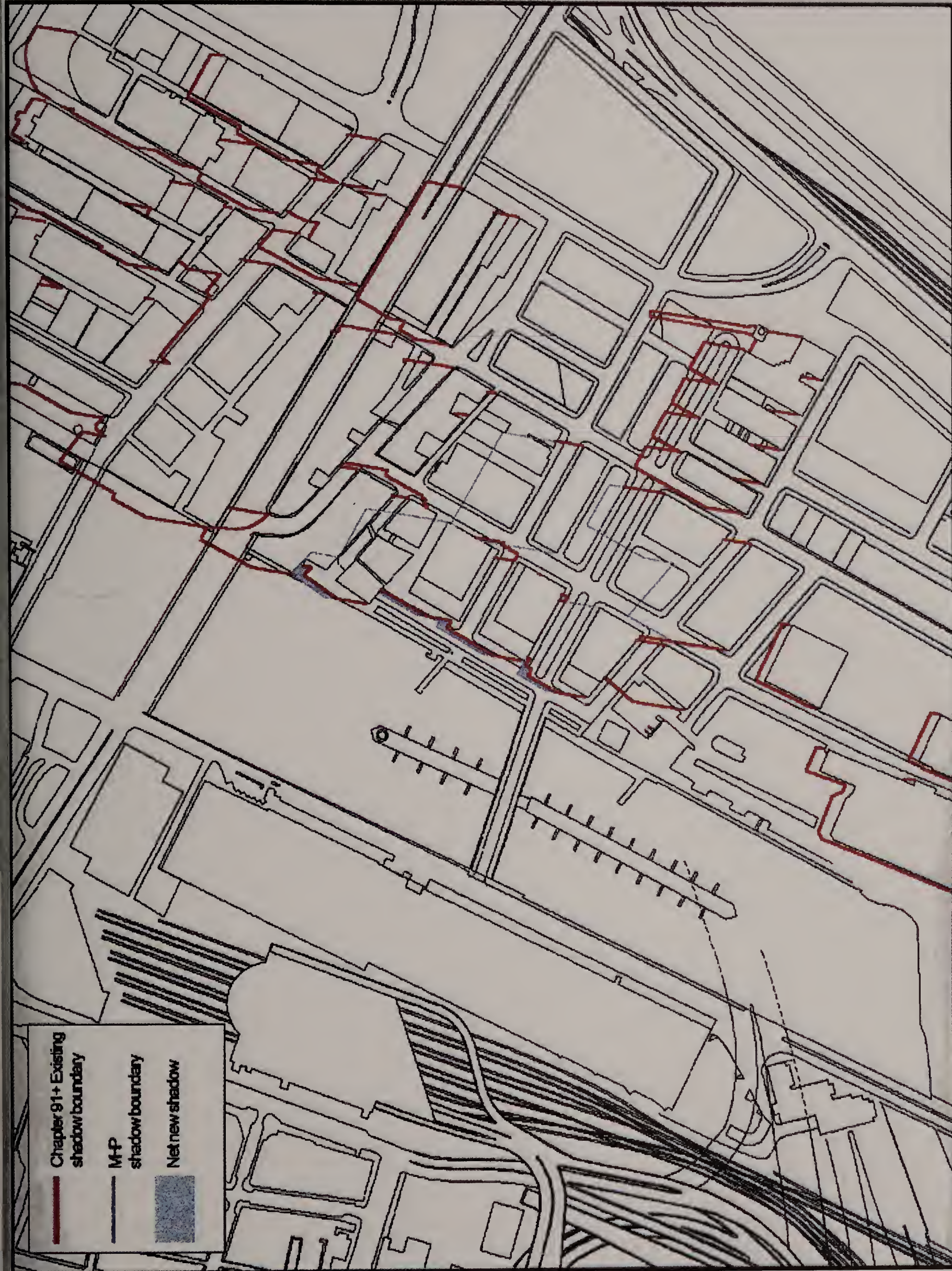


Figure 8-13(5) Wormwood Area
October 23 1 pm Net New Shadow

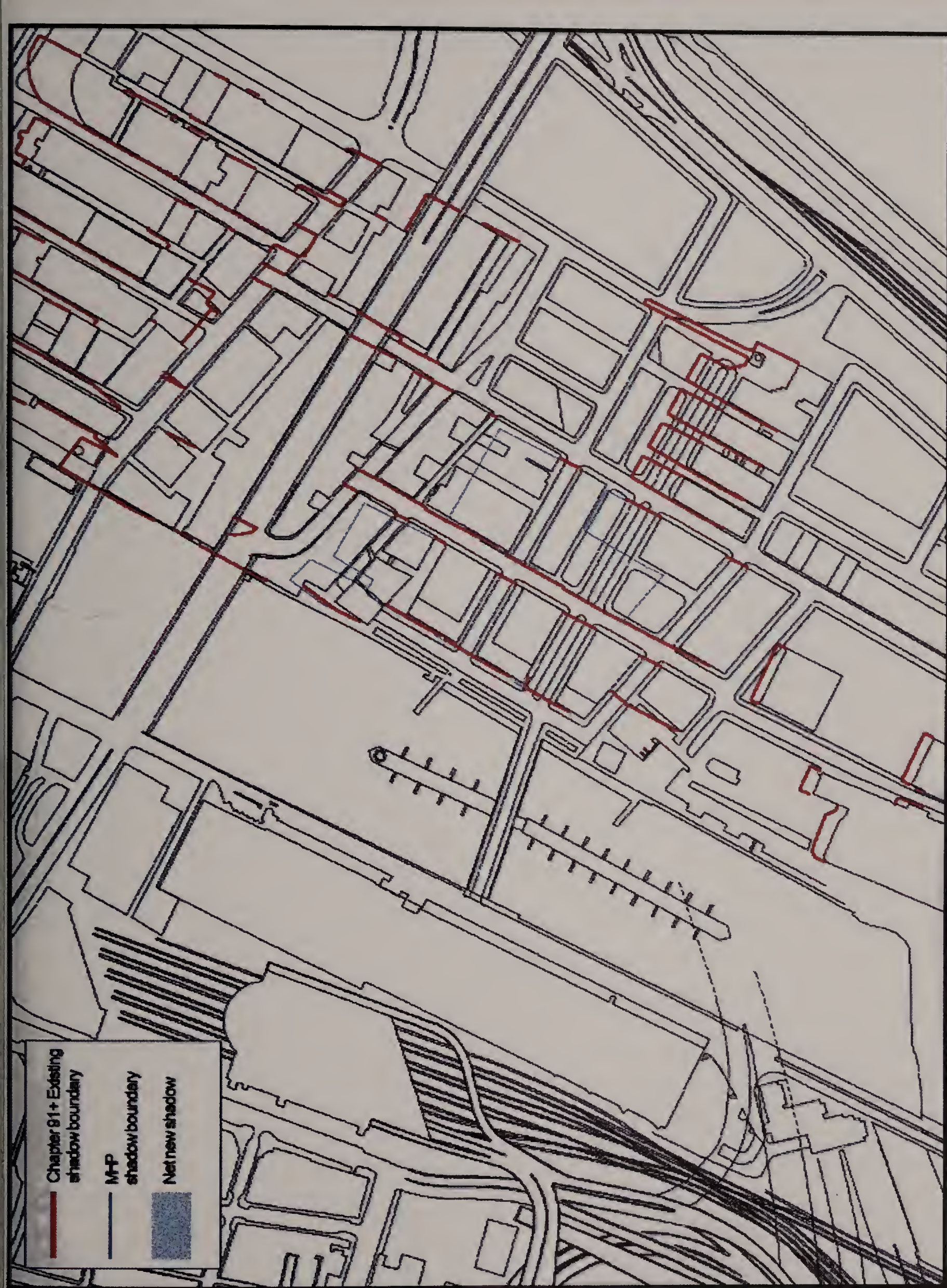


Figure 8-13(6) Wormwood Area
October 23 2 pm Net New Shadow

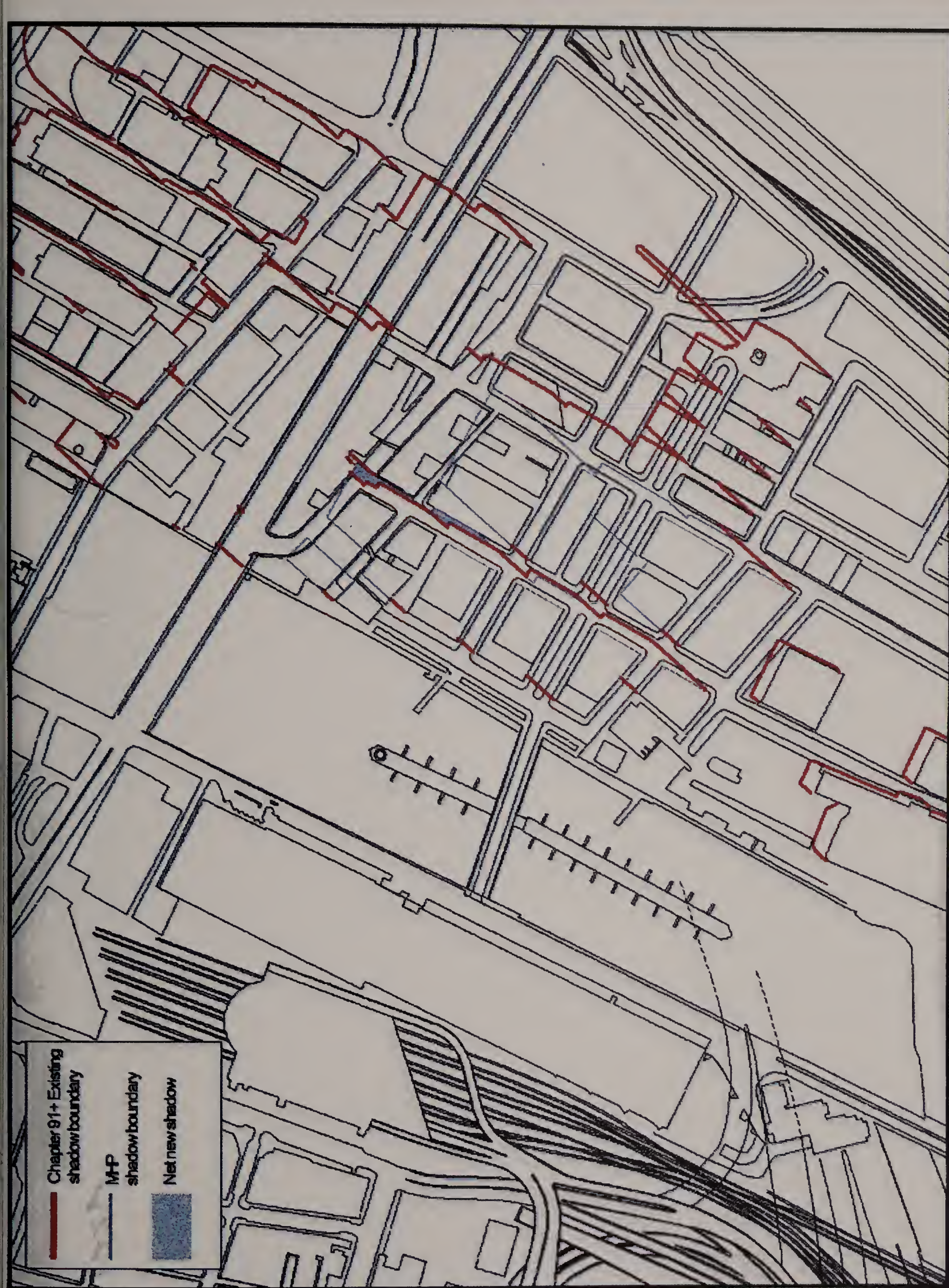


Figure 8-13(7) Wormwood Area
October 23 3 pm Net New Shadow

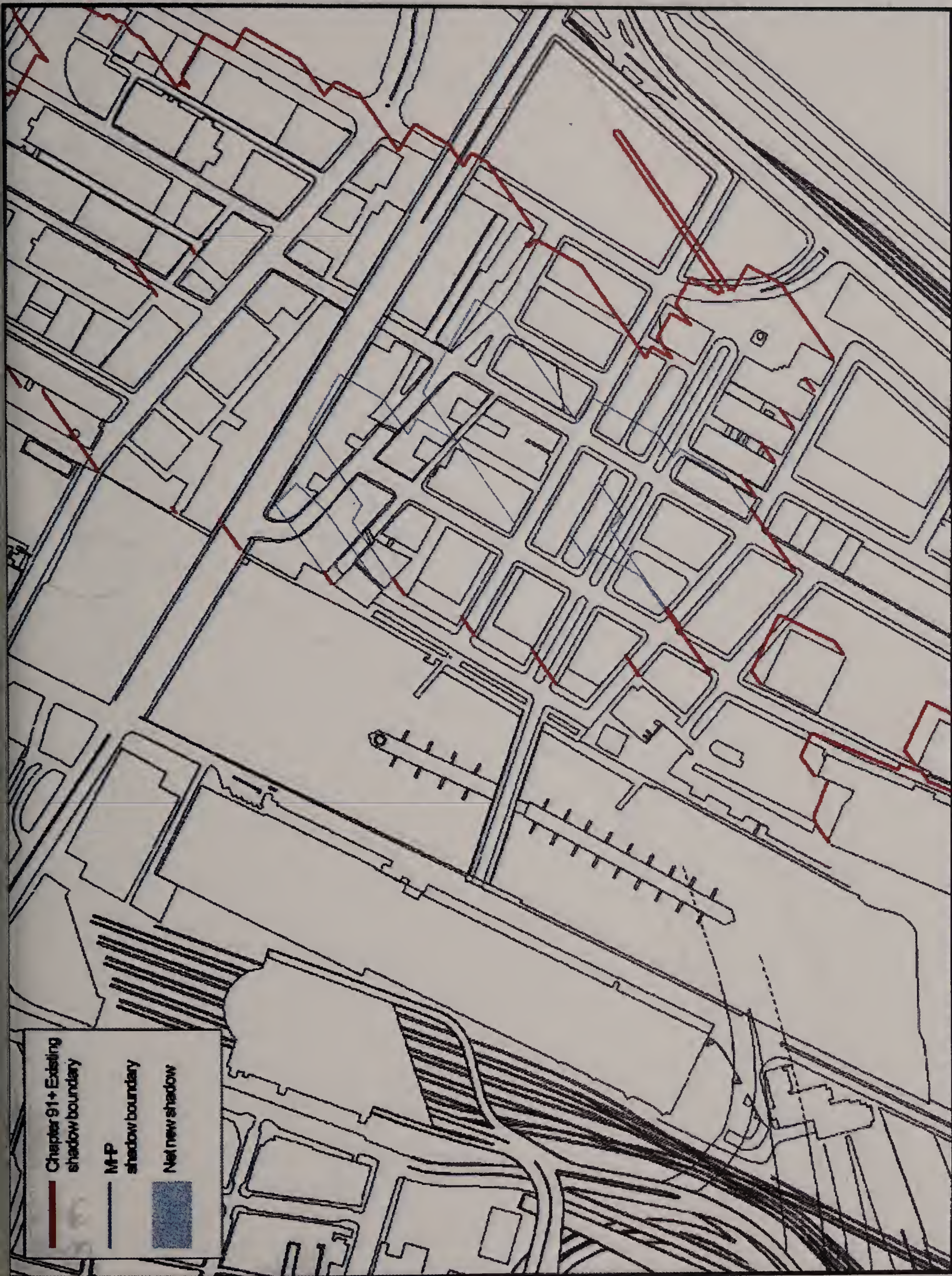


Figure 8-13(8) Wormwood Area
October 23 4 pm Net New Shadow

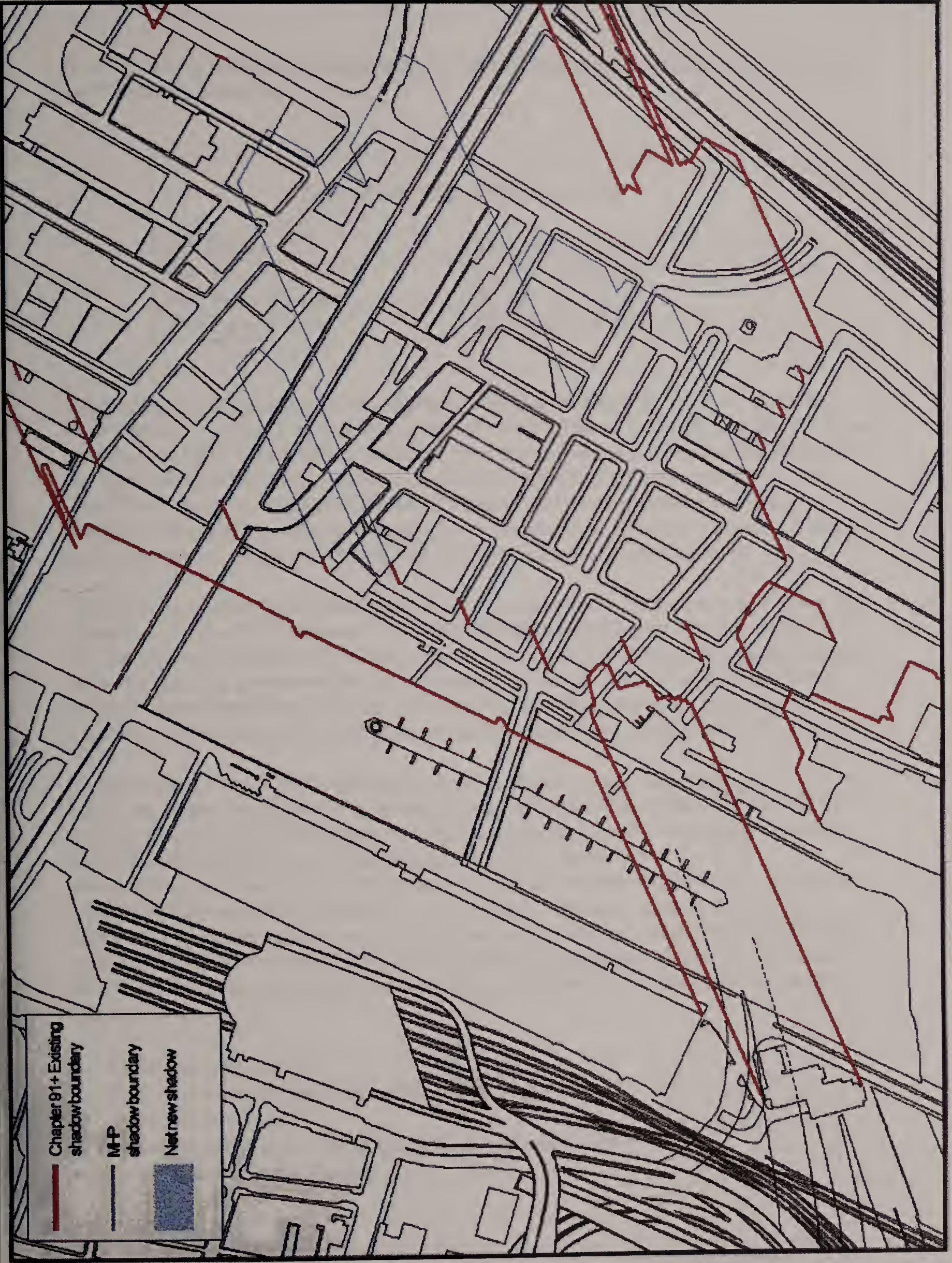


Figure 8-13(9) Wormwood Area
October 23 5 pm Net New Shadow

shadows cast on open space resources that would otherwise not have been required under the Chapter 91 build-out.

TABLE OF NET NEW SHADOW	
Fan Pier	253,745 square feet
Pier 4	34, 639 square feet
Fort Point Channel	47, 868 square feet
Wormwood Area	13,623 square feet

Offsets for Net New Shadow. Our comparative analysis is based on our representative MHP buildout. Because the height criteria and substitutions in the Municipal Harbor Plan provide for a maximum building envelope, an actual project may vary significantly from our representative buildout. Likewise the shadow impacts of an actual project may vary significantly from the impacts of the MHP buildout and create generally less shadow impacts. Using the representative buildout to estimate shadow impacts has enabled us to better understand the level of offsets that will be required of an actual project.

Given the most conservative interpretation of shadow impacts, each square foot of net new shadow would result in a diminishing of the pedestrian environment to some degree. To what degree more modest conditions of shadow may subtly discourage people from using the waterfront is a question without a demonstrable answer. It must be assumed for the purpose of the substitution analysis, however, that some negative effect may take place. Therefore, for each square foot of net new shadow, some level of offset must be provided.

Certain offsets more effectively compensate for certain impacts than others. Also, some offsets are more appropriate for a particular geographic area than others. Generally, we can say the greater shadow impacts of height substitutions should be offset by measures which provide people with alternative places to gather, relax or wait for water transportation or provide them with a reason to come to waterfront. Below is a list of the types of public benefits that we believe appropriately offset the negative impacts of shadow. Appropriate offsets and their relative priority will vary with each subdistrict and with the size of the site area. A detailed discussion of appropriate offsets for the various sites in the South Boston Waterfront with height substitutions is included in the subdistrict chapters.

- *Additional Open Space*
- *Civic, Cultural and Educational Facilities*
- *Four-Season Rooms*
- *Upper Floor “Active” Facilities of Public Accommodation*
- *Public Water-Related Facilities*

- *Water Transportation Service or Subsidy*
- *Other Qualitative Offsets*

Section 8.9 contains a detailed description of each of these benefits and the elements that are necessary for them to be counted as offsets.

8.8 NEW PILE-SUPPORTED STRUCTURES FOR NONWATER-DEPENDENT USE - 310 CMR 9.51(3)(a)

The Waterways Regulations prohibit new pile-supported structures for nonwater-dependent use from extending beyond the footprint of existing, previously authorized pile-supported structures or pile fields, except where no further seaward projection occurs and the area of open water lost due to such extension is replaced, on at least a 1:1 square foot basis, through the removal of existing, previously authorized fill or pile-supported structures or pile fields elsewhere on the project site. DEP will waive the on-site replacement requirement if the project conforms to a municipal harbor plan which specifies alternative limitations which ensure no net loss of open water will occur for nonwater-dependent purposes, in order to maintain or improve the overall capacity of the state's waterways to accommodate public use in the exercise of water-related rights, as appropriate for the harbor in question.

One of the primary goals of this Municipal Harbor Plan is to provide public access to both the waterfront and the watersheet. Not everyone has the opportunity to get out onto the water, whether on a boat or a floating walkway. Because watersheet is a scarce public resource, public watersheet use should be for water-dependent purposes. No substitutions for this provision are included in this Municipal Harbor Plan.

8.9 OFFSETS FOR IMPACTS OF SUBSTITUTION PROVISIONS

Below is an extensive menu of offsetting measures identified during the municipal harbor planning process as measures that are appropriate to mitigate, compensate or offset the negative impacts of substitutions throughout the South Boston Waterfront. Our goal was to identify the offset or program of offsets, on a site by site basis, that would most effectively offset the negative impact of the substitute provisions that were developed for that site, and which also would be most effective at fostering public use and access to the waterfront and watersheet throughout the year. It is important to note that not all substitute provisions negatively impact public water-related rights, and some substitutions may in fact enhance both the public realm and state tidelands policy objectives. It is, however, equally important to offset appropriately those substitutions that do have a negative impact.

For each site in the MHP Area for which substitution provisions are identified, a program of offsets was developed. In the chapters that follow, specific substitution provisions are identified for various sites in the South Boston Waterfront. The negative impacts of these

substitution provisions will be mitigated, compensated or offset by a particular program of offsets chosen from those identified below. In order for a particular measure to qualify as an offset or compensatory measure, the measure must be a) in accordance with the guidelines established below; and b) commensurate with the negative impacts of the substitute provisions. In addition, property owners must provide the offsets coincident with the completion of the project.

In developing offsets for the impacts of the substitutions requested, we followed these guidelines:

- In the first instance, we considered offsetting a requested substitution with an in-kind offset in a proximate location. For example, in certain cases it has been possible to implement the principles of the Public Realm Plan by narrowing the water-dependent use zone at one portion of a project site or subdistrict and widening it at another. In fact, approximately half of the substitutions requested in this Municipal Harbor Plan are offset in this manner. This approach was not used in those instances where its application would undercut the rationale for the requested substitution.
- Where an in-kind offset was not appropriate, we considered offsetting a substitution by increasing the performance standard of another quantitative requirement of the Waterways Regulations. Several of the substitutions in this Municipal Harbor Plan are offset in this manner.
- Where an increased performance standard of another quantitative requirement is not appropriate, we considered qualitative measures that will effectively promote state tidelands objectives. In certain cases, this approach has been appropriate to reconcile the principles of the Public Realm Plan with the requirements of the Waterways Regulations.

The Waterways Regulations permit offsets to be in-kind, such as increased open space at one location in exchange for less open space at another, or out-of-kind, such as increased open space in exchange for greater height, or qualitative, such as a water transit subsidy to offset impacts of a reduced water-dependent use zone. The goal of any offsetting measure is to mitigate, compensate or otherwise offset negative impacts of substitutions, and there is more than one way to accomplish this goal. Certain benefits more effectively offset or compensate for certain impacts than others. For example, increased heights typically generate greater shadow impacts. Interior public spaces that are available to the public without charge, such as a winter garden or sun room, which provide sheltered interior space along the water, offset the increased shadow impacts by increasing the appeal of the waterfront area through the colder months. Similarly, public upper floor and roof top viewing areas which provide people with different vantage points from which to enjoy Harbor views and the waterfront area, are another appropriate offset for increased shadow impacts.

Offsets allow us to finish what we started with the substitute provisions – create an urban waterfront neighborhood characterized by a mix of uses, density and a variety of heights and architectural styles. The possible offsets included below are geared toward offsetting impacts in a manner that brings us closer to this goal.

Additional Open Space. The Waterways Regulations limit lot coverage to 50%. In the South Boston Waterfront, the area that is not located within building footprints is comprised of Harborwalk, plazas and promenades, green space, streets and sidewalks. As an offset, property owners at some sites will be required to provide open space in excess of the 50% requirement to offset negative impacts of substitutions. Such additional open space must be pedestrian-oriented in order to be eligible as an offsetting measures. For example, open space that is green space, plazas or promenades is eligible as an offset, whereas additional roadways are not.

Civic, Cultural and Educational Facilities. Every neighborhood has its cultural and civic facilities – they are part of what makes an area more than just a section of the City, but a true neighborhood. In order to ensure that the South Boston Waterfront develops into more than an office or tourist district, the Public Realm Plan has encouraged property owners to include these types of uses in their developments.

In Section 7.5, this Municipal Harbor Plan requires property owners to include civic, cultural and historic programming and uses into their sites. In order to qualify as an offset, a civic, cultural or educational facility must be above and beyond what is encompassed by this baseline requirement. For example, incorporation of an historic piers network plan or pieces of public art into a site are *programming* or *uses*, and are baseline requirements under this Municipal Harbor Plan. A new maritime or art museum is a *facility*, and would qualify as an offset. Types of educational, cultural and civic facilities include museums, libraries, and performance facilities. Property owners may be required to include these types of facilities in their projects as offsetting measures.

Four-Season Rooms. The Waterways Regulations require 100% of the ground floor of nonwater-dependent use projects located on Commonwealth tidelands to be devoted to facilities of public accommodation. The Waterways Regulations provide a menu of types of such facilities, including restaurants, performance areas, hotels, retail establishments, and educational and cultural institutions. The majority of the facilities of public accommodation in existing waterfront developments are retail establishments, hotel lobbies and restaurants, because of their revenue generating capability. While these types of facilities are important activity generators, a greater variety of facilities of public accommodation will provide the public with a greater variety of waterfront experiences.

It is important that residents and visitors be able to visit the waterfront in all kinds of weather without feeling they must purchase something from a store or eat at a restaurant. Many of the property owners in the District will be required to include significant interior public spaces that will be open to the public, free of charge, as an offsetting measure. We envision these spaces, what we call four-season rooms, as an extension of the public realm.

These spaces must be open and available to the public from 6 a.m. to midnight regardless of whether they chose to patronize nearby restaurant or retail establishments. Four-season rooms must include public seating and other amenities, and have visual accessibility to the outside, and may be located on the ground floor or the upper floor of a project. Upper floor viewing and sitting areas with expansive views of the Harbor, possibly with adjoining exterior space, are another amenity that some property owners will be required to provide as an offset.

By creating truly welcoming public spaces, we extend the appeal of the waterfront area throughout the season and during inclement weather. By providing the public with weather-protected places to sit, relax and enjoy the Harbor, wait for a water shuttle or buy a ticket to a ferry, or a place to buy a cup of coffee or a sandwich, we add to the variety of experiences that will draw people to the area, which in turn will support and complement cultural and other uses located nearby. These four-season rooms are an important component of the activation strategy for the South Boston Waterfront. They are not, however, typical facilities of public accommodation. Four-season spaces that meet the above criteria are beyond the public activation requirements of the Waterways Regulations detailed in 310 CMR 9.53, and thus are appropriate as an offsetting measure. activation requirements of the Waterways Regulations detailed in 310 CMR 9.53.

Public Water-Related Facilities. The Waterways Regulations establish baseline requirements for water-related public benefits that must be incorporated into a project in order for the project to obtain a Chapter 91 License. Under the Waterways Regulations, a nonwater-dependent use project that includes a water-dependent use zone must include a pedestrian-access network meeting certain criteria and one or more facilities that generate water-dependent activity “of a kind and to a degree that is appropriate for the project site, given the nature of the project, conditions of the water body on which it is located, and other relevant circumstances”. 310 CMR 9.52(1)(a). Suggested facilities include boat landing docks and launching ramps, marinas, fishing piers, waterfront boardwalks and esplanades for public recreation. On Commonwealth tidelands, at least one of these facilities must also promote water-based activity, such as ferries, cruise ships, water shuttles, public landings, swimming/fishing areas, excursion/charter/rental docks and community sailing centers. 310 CMR 9.53(2)(a).

Larger projects are required to provide facilities in excess of these baseline requirements. The actual level of water-related public benefits that a project must provide is determined in the Chapter 91 licensing process. Another possible offset is the provision of water-related public facilities such as those listed in the Waterways Regulations beyond what would be required of the project under the Chapter 91 regulations. Of particular interest are those facilities that will activate the watersheet by giving the general public opportunities to get out onto the water. Additional infrastructure improvements are another offset option. The combination of a broad array of publicly accessible facilities and creative watersheet programming can be an effective means of offsetting the negative impacts, for example, the combination of height and setback substitutions may have on the pedestrian environment.

Water Transportation Service or Subsidy. The promotion of a broad array of water transit options is one the City's priorities throughout the Harbor, and a primary strategy for activating both the watersheet and the water's edge. This is a particularly attractive offset option for locations with little opportunity to include offsets on site. Water transportation is a broad term that includes commuter service, excursion service, Cultural Loop service, even water taxi service. Water transportation services and subsidies as an offsetting measure can support varying levels of commuter, excursion and Cultural Loop services.

As the City's planning agency, the BRA will establish a Water Transportation Fund to receive the water transit subsidies from property owners. Boston Harbor is in need of public handicapped-accessible docks and additional water transportation services. Also, more communities should be accessible by water. The Cultural Loop service, initially funded by the BRA and Massport as a demonstration project, provided scheduled water transit to major cultural locations in the Inner Harbor, and is an important form of water transportation that would benefit the public. The recently completed *Boston Inner Harbor Passenger Water Transportation Plan* can provide guidance as to how the funds should be used.

The Water Transportation Fund will be run by the BRA. The funds must be used for capital improvements, or to fund water transportation services, but cannot be used by the BRA to subsidize administrative costs associated with the fund. Use of the funds will be subject to public bidding procedures. The context for use of the funds will be the Boston Inner Harbor Passenger Water Transportation Plan and the City of Boston Municipal Harbor Plans.

Upper Floor "Active" Facilities of Public Accommodation. The Waterways Regulations require 100% of the ground floor of nonwater-dependent use projects located on Commonwealth tidelands to be devoted to facilities of public accommodation. Certain facilities of public accommodation are expected to generate more in the way of public activity than others. For example, while a hotel is considered a facility of public accommodation, the upper floors typically are devoted to rooms, and are not expected to result in significant activation of the waterfront area. Other facilities, such as restaurants, retail stores and cultural or performance facilities are expected to help to generate significant pedestrian activity. Those facilities of public accommodation that we consider "active", when located on an upper floor, may be used as an offset. Cultural and civic uses, although also likely to produce significant pedestrian activity, are included in a separate category above.

The Fund for Parks and Recreation in Boston. The Fund for Parks and Recreation in Boston (the Parks Fund) is a trust established in 1983 for the purpose of "furthering the maintenance and preservation of parks now or in the future belonging to the City of Boston and providing recreational facilities and programs to the residents of Boston". A copy of the trust document is contained in Appendix 5. As an offset for those parcels in the Fort Point Historic Subdistrict that have the benefit of lot coverage and open space

substitutions, property owners will be required to contribute a dollar amount to a special Parks Fund account that will be established for the acquisition, design, construction and long-term maintenance of new public park space in the South Boston Waterfront.

The terms of the trust document permit us to attach special restrictions to funds contributed to the trust. In this way, we can specify that funds generated by property owners taking advantage of this lot coverage substitution will be used in a specific geographic area. We will specify the geographic area as the South Boston Waterfront. We also will specify that any new park space must either be in Chapter 91 jurisdiction, or have a relationship to other open space parcels in Chapter 91 jurisdiction.

The Parks Fund is an appropriate vehicle to receive contributions by developers because it has the purpose and the power to provide for and maintain open space. By creating an account dedicated to funding a new park in the South Boston Waterfront, we can aggregate the contributions of all property owners seeking to take advantage of this substitution. This will permit us to fund a more significant park space for area residents than the small pocket parks that would arise from application of the 50% lot coverage ratio. This lot coverage ratio and offset also is more likely actually to result in new public open space, given the infeasibility of infill development without this substitute provision.

Because the Fort Point waterfront, like the rest of the South Boston Waterfront, is located on Commonwealth tidelands, those areas not located in a building footprint are required to be public open space for active or passive recreation. Thus each lot coverage substitution carries a corresponding substitution for the provision of public open space for recreation. The offset developed for this substitution is taken into account in the amount that we determined was an appropriate per square footage contribution.

We have reviewed with the City's Parks and Recreation Department the build-out costs of recent urban park areas. Based on this information, we have determined that an appropriate amount for the design and construction of urban park areas is \$75 per square foot. Accordingly, for property owners seeking to take advantage of this lot coverage substitution, for every square foot their project exceeds 50% lot coverage, \$75 must be contributed to the account established for the South Boston Waterfront Account in The Fund for Parks and Recreation in Boston for the acquisition, design and construction of public parks.

In addition, we have included an amount earmarked toward the long-term maintenance of park space. This amount will be an annual payment of \$2 per square foot for every square foot that a project exceeds 50% lot coverage. Both the long-term maintenance and design and construction figures are based on year 2000 dollars. These amounts will increase with increases in the Consumer Price Index.

Public Realm Plan and Municipal Harbor Plan Comparison

	Public Realm Plan	Municipal Harbor Plan
Residential Use	25% of new development must be residential.	New, large-scale, mixed use developments must include at least one-third residential uses. Large-scale development cannot include more than one-third office uses.
Density	General height parameters only, with language indicating density is important to generate a mixed-use, active neighborhood.	For Fan Pier and Pier 4, floor area ratios of new, large-scale developments should range from 5 to 5.5. In the Fort Point Historic Subdistrict, floor area ratios should be up to 3.5 to 4.0.
Setback		
(a) Fan Pier	On Fan Pier, setback is approximately 70 feet along the fan edge.	On Fan Pier, setback is 140 feet along the fan edge.
(b) Pier 4	On Pier 4, setback is approximately 30 feet along the harbor edge.	On Pier 4, setback is 200 feet along the harbor edge.
(c) Wormwood	In the Fort Point Historic District, setback is 100 feet along the Channel and 65,100 square feet overall.	No change.
Amount of Open Space		
(a) Fan Pier	48% of Fan Pier is open space.	50% of Fan Pier is open space.
(b) Pier 4	35% of Pier 4 is open space.	50% of Pier 4 is open space.
(c) Wormwood	51% of Wormwood area in Chapter 91 jurisdiction is open space.	50% of Wormwood area in Chapter 91 jurisdiction is open space.

	Public Realm Plan	Municipal Harbor Plan
<p>Configurations of Open Space</p> <p>(a) Inner Harbor Subdistrict</p> <p>(b) Wormwood</p>	<p>Most open space in the Inner Harbor Subdistrict is located on a new, large pier to be located in the middle of Fan Pier cove.</p> <p>The majority of open space in the Wormwood area of the Fort Point Historic Subdistrict is a 3.5 acre greenway connecting the Channel to the Convention Center, following a straight configuration. (Approximately 1.25 acres of this area falls within the MHP area.)</p>	<p>The bulk of the open space in the Inner Harbor Subdistrict is located on existing fill and concentrated at the fan and cove edges, and at the harbor edge of Pier 4.</p> <p>Taking into account the limitations imposed by the location of the Central Artery/Tunnel Project tunnel box, the greenway is reconfigured to allow buildings where the ground will support structures and to maintain the connection between the convention center and the Channel.</p>
<p>Street and Block Plans as Impacted by Open Space Amounts and Configurations</p> <p>(a) Inner Harbor Subdistrict</p> <p>(b) Wormwood</p>	<p>Six building blocks between Court Street and West Service Road.</p>	<p>Six building blocks between Court Street and West Service Road are maintained with larger setback from the fan edge to create smaller blocks and keep the same number of view corridors.</p> <p>A new street and block plan is characterized primarily by smaller blocks and an increase in the number of view corridors between A Street and Fort Point Channel from one to three.</p>

	Public Realm Plan	Municipal Harbor Plan
Building Height		
(a) Fort Point Channel	<p>Along Fort Point Channel, heights are limited to 75 feet.</p>	No change.
(b) Inner Harbor Subdistrict	<p>For the Inner Harbor Subdistrict, the no-build zone is 30 feet. Heights are limited to 75 feet within 200 feet of the pier and bulkhead line, and may increase as the buildings step back further from the water. At 200 feet, Planned Development Area Designations are permitted. The base height limit beginning in these areas is 150 feet, although higher heights are possible with PDA designation.</p>	<p>For the Fan Pier, the no-build zone is at 140 feet. At 140 feet, building heights may be up to 175 feet. For Pier 4, the no-build zone is 200 feet. At 200 feet, building heights may be up to 100 feet. As buildings step back from the water, building heights may rise to 200, 250, and 275 feet, up to a maximum of 300 feet. Urban design guidelines require buildings to include a street wall of 75-85 feet, and limit the size of tower elements to 25,000 square feet.</p>
(c) Wormwood	<p>North of the mall area, heights may rise to a maximum of 150 feet. South of the mall area, heights are limited to 100 feet, sloping downward as buildings approach the South Boston neighborhood.</p>	<p>Maintains orientation of the Public Realm Plan, although the exact configuration varies in accordance with the new open space configuration.</p>

9.0 FORT POINT CHANNEL

Fort Point Channel, shown in Figure 1-1, is a narrow body of water located between the City's Financial District and the South Boston Waterfront District. The Channel, less than 600 feet wide at the old Northern Avenue Bridge, was first laid out in 1837.

Existing uses in Basin A include Hook Lobster, the Barking Crab restaurant, a private marina facility, Neptune Marine Services and Neptune Lobster & Seafood Co. Basin B already is one of the more highly active Channel basins. The Children's Museum, which is expanding into the adjacent space formerly occupied by the Computer Museum, has ambitious plans for the redevelopment of Museum Wharf and for expanding its activities out onto the watersheet. The Tea Party Ship is docked off the Congress Street Bridge and the *M/V Chelsea* is, for the time being, also docked off of the Congress Street Bridge. The Central Artery/Tunnel Project will construct a new major water transportation facility at the Boston Edison/Russia Wharf site. There currently is very limited water sheet activity in the Channel except for construction related to the CA/T Project and the South Boston Transitway.

Basin A of the Channel is the location of the old Northern Avenue Bridge which is in an advanced state of disrepair. The City is investigating options for replacing the bridge with a pedestrian connector at the same location. The Evelyn W. Moakley Bridge connects the Financial District to new Northern Avenue, a major vehicular artery to the South Boston Waterfront District. The Congress Street Bridge will be undergoing reconstruction, while reconstruction of the Summer Street Bridge is complete. A new Broadway Bridge that aligns with Traveler Street was completed as part of the CA/T Project. The Dorchester Avenue Bridge and the Old Colony Railroad Bridge also will be replaced in conjunction with the CA/T Project.

9.1 PLANNING OBJECTIVES FOR FORT POINT CHANNEL

Fort Point Channel is the only South Boston Waterfront District that is itself a body of water. Fort Point Channel can and should be the focus of the land areas that surround it. Its location between the densely-developed Financial District and the as yet relatively undeveloped South Boston Waterfront District places this small body of water in a position to draw people from other Boston neighborhoods to the Fort Point waterfront and across its bridges into the South Boston Waterfront District. A high level of activation is planned for the Fort Point Channel. The Public Realm Plan envisions the Channel becoming "the next great place in the City". Bridge crossings, streets and promenades along its edges and boating activity, water transportation and public uses and piers within the Channel, will create a dynamic setting for a variety of uses on the land that surrounds Fort Point Channel. For planning purposes we have divided the Channel into five basins, A through E, each with different characteristics. Basin E would be created by dividing the existing Basin D into two basins with a new pedestrian connector.

- **Promote Access to Boston Harbor as a Shared Natural Resource**

Fort Point Channel has the potential to be an exciting new civic area for the City. New educational and cultural uses will complement existing public attractions, such as the Children's Museum and the Tea Party Ship. New development on both sides of the Channel will create a density of population to activate use on and at the water's edge. The sheltered waters of the Channel provide a wonderful opportunity to bring people out onto the water with new floating public uses and public boat rentals. The Boston Edison/Russia Wharf site was identified in the City's Water Transportation Plan as the site of a new water transportation facility, with planned service to the Charlestown Navy Yard. When Harborwalk is completed on all three sides of the Channel, much of it by the CA/T Project, the City will have a new waterfront promenade that will be lined with trees, benches, cultural and educational uses, shops, galleries, cafés and restaurants. Activation of Fort Point Channel and the land areas surrounding it is one of the City's primary strategies for increasing public access to waterfront areas.

- **Preserve and Enhance the Industrial Port**

The bulk of the City's industrial port activities have migrated to other areas of Boston Harbor, such as the Boston Marine Industrial Park, the Moran Terminal and the upper areas of Chelsea Creek. Fort Point Channel itself is very limited in terms of maritime industrial activity. Today, Hook Lobster, Neptune Lobster & Seafood Co. and Neptune Marine Services are the only remaining maritime commercial users located on the Channel. Gillette, a water-dependent industrial user, and several smaller industrial users, however, are located in the Fort Point Industrial Subdistrict adjacent to Basin E of the Channel. The Channel can become an important new water resource for the City, and is an ideal place to locate active water sheet uses, provided they do not interfere with existing industrial uses.

- **Plan the District as a Vital, Mixed-Use Area**

Fort Point Channel will become a new City park. An exciting mix of public uses, including new cultural, educational and recreational uses, is planned for the Channel. While the landside areas that surround the Channel will be devoted to a mix of industrial, commercial, retail, residential, cultural and recreational uses, the City intends that the Channel itself will become a public area for residents and visitors to enjoy. An active Channel will support an active pedestrian environment, and vice versa, and will enhance and draw from nearby uses.

- **Develop the District as an Integral Part of Boston's Economy**

As an expanded cultural and educational destination, the Channel will become of even greater interest to the City's many visitors. As a new link in the City's recreational network, the Channel will provide the residents of the City's neighborhoods with a new

place where they can relax and play. Fort Point Channel, less than a block away from South Station, already benefits from excellent public transportation connections on the landside, and the new South Boston Transitway will extend public transportation into the South Boston Waterfront. When the CA/T Project completes the new water transportation facility at the Boston Edison/Russia Wharf site, the area also will have water transportation connections to other areas of the Harbor. By linking the Channel with new pedestrian trails and streets to the City's existing transportation, recreation and cultural networks, the area becomes an integral part of Boston.

- **Enhance the South Boston Community**

The South Boston community is one of the closest residential communities to the Fort Point Channel, and as such stands to benefit greatly from all that the Fort Point Channel will offer, including new modes of transportation, new recreational opportunities and new cultural and educational uses. Moreover, an activated Fort Point Channel will encourage and support new development along adjacent land areas, generating linkage funds for affordable housing production.

9.2 FORT POINT CHANNEL PUBLIC ACTIVATION PLAN

Activation of the Channel will be one of the most complex and challenging goals of the City's waterfront planning. While the Public Realm Plan envisions a multitude of new public water-dependent uses in Fort Point Channel itself, including water transportation, small boat rentals, educational and cultural facilities and Harborwalk, the Channel as it exists also has a unique character that should be respected as we seek to incorporate new uses into the Channel.

As part of the public process for this Municipal Harbor Plan, the BRA formed the Fort Point Channel Working Group, made up of members of the Municipal Harbor Plan Advisory Committee, property owners along the Channel and other interested parties. The purpose of the Working Group is to develop a public activation plan for Fort Point Channel. With so many competing interests at stake, a thorough analysis of existing and possible future conditions was warranted.

The first task of the Fort Point Channel Working Group was to conduct a study of Fort Point Channel, including both physical characteristics of the Channel basins and the regulatory environment to which the Channel is subject. The Working Group then developed the following planning goals for the Channel and its edges:

- To activate Fort Point Channel and its edges and provide for special destinations so as to attract the public and generate public activity on a year-round basis.
- To enhance public access (pedestrian, transit, bicycle, water) from all Boston neighborhoods and from the downtown to Fort Point Channel.

- To enhance the civic role of the Channel in connecting to other public venues, such as Harborwalk, the planned Central Artery Park and Massachusetts Horticultural development, Dewey Square, South Station, Chinatown and South Bay Harbortrail.
- To create land or water connections to existing and planned open spaces, such as the Fan Pier Cove, the park at the Federal Courthouse; the MBTA's "Mitigation Park" adjacent to the Evelyn Moakley Bridge; Museum Wharf; a planned east/west linear park at Wormwood Street connecting the Fort Point Channel to West Service Road and Boston's new convention center; and Cabot Cove park at the southern tip of the Channel.
- To enhance Fort Point Channel for a variety of water-dependent uses, such as water transportation, recreational boating, and as a safe refuge for boats and to protect the needs of existing water-dependent uses.
- To preserve and enhance the historic character of Fort Point Channel, such as its historic seawalls and the historic Boston Wharf Company district in South Boston.
- To establish strong connections between Fort Point Channel and other waterfront attractions and destinations.

Next, the Fort Point Channel Working Group identified possible new uses and structures for the Channel, with a focus on providing opportunities for the public to experience the water by bringing people out onto the watersheet. The next step is to study various implementation strategies with respect to permitting, constructing and managing the new uses that are envisioned for the Fort Point Channel. The goal of the Fort Point Channel Working Group is to develop a public activation plan for the Channel that will include a set of preferred implementation strategies to achieve the plan.

To take planning for the Fort Point Channel to the next level, a Request for Proposals will be issued for a consultant to assist the BRA and the Fort Point Channel Working Group in developing a Public Activation Plan and implementation strategy for Fort Point Channel. The plan will encompass the watersheet, the edges of the Channel and connections to the Channel. The plan will build upon the work of the Fort Point Channel Working Group to identify and prioritize year-round public land and water uses that will ensure that Fort Point Channel retains and enhances its role as a special destination. The plan also will include an implementation strategy that will include a proposed phasing schedule and budget.

The purpose of the Public Activation Plan is to provide a blueprint for the development of new uses and structures that will make the make Fort Point Channel a great civic space. The Waterways Regulations establish baseline requirements for water-related public benefits that must be incorporated into a project in order for the project to obtain a Chapter 91 License. The Public Activation Plan will direct them to the uses and structures that we

want them to provide in connection with their development of jurisdictional lands, and provide guidance to DEP in making decisions regarding Chapter 91 licenses. The Public Activation Plan also could be a source of offsets for the negative impact of substitute provisions that are granted for properties located on either side of Fort Point Channel. The Public Activation Plan will help us to achieve the Fort Point Channel that draws people from all corners of the City to the waterfront.

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10.0 INNER HARBOR SUBDISTRICT

The area that we refer to as the Inner Harbor Subdistrict lies generally between Fort Point Channel and the Boston Fish Pier and Boston Marine Industrial Park, and between Summer Street and Northern Avenue and the Inner Harbor, and includes approximately 125 acres of land and pier. The portion of the subdistrict that is included in the MHP Area, shown in Figure 10-1, is comprised of approximately 43 acres of land and pier. The area is owned primarily by four private landowners.

The Inner Harbor is the only South Boston Waterfront Subdistrict that fronts both the Fort Point Channel and Boston Harbor. It has long, large piers and slips, some with deep water access. The Inner Harbor is close to the downtown Financial District and the site of the new convention center. The area currently is home to the new Federal Courthouse building, the World Trade Center at Commonwealth Pier, the Seaport Hotel and acres of surface parking. On Northern Avenue, adjacent to the Seaport Hotel, a new 17-story office building will be completed in Summer 2000, while construction began on a second office building in Spring 2000. The Inner Harbor Subdistrict, along with the rest of the South Boston Waterfront District, stands to benefit greatly from over \$7 billion in infrastructure improvements, including the Ted Williams Tunnel, the Turnpike extension and the Silver Line Transitway. It is, however, the subdistrict that has the highest challenge in terms of complex highway interchanges and access ramps that are the base upon which we must weave an urban neighborhood fabric.

This Chapter first reviews the Public Realm Plan planning objectives for the Inner Harbor and the role that the Inner Harbor will play in making the Public Realm Plan a reality. Then, building upon the Open Space and Public Space Baseline Requirements and Guidelines (Chapter 7) and The Public Realm Plan and the City's Approach to Substitutions and Offsets (Chapter 8), for each parcel, this chapter establishes general development guidelines for the subdistrict. Then, on a parcel by parcel basis, this Chapter describes the particular substitutions developed, analyzes the impacts of the substitutions, then establishes appropriate offsets for that particular parcel.

Because of the uniqueness of the various parcels within the Inner Harbor, no single substitution or program of substitutions is appropriate for all of the parcels within the subdistrict. Based on both historic conditions and existing patterns of ownership, the Inner Harbor has certain commonly identified sites, for example, Fan Pier, Pier 4 and the Barking Crab parcel. See Figure 10-1. Each of these sites warrants distinctive treatment with respect to substitutions and offsets. The BRA views each substitute provision and corresponding offset as part of a program which, when taken as a whole, are designed to implement the Public Realm Plan.

10.1 PLANNING OBJECTIVES FOR THE INNER HARBOR

The Public Realm Plan has identified the Inner Harbor as one of the South Boston Waterfront subdistricts suitable for more intensive development efforts for several reasons. As pedestrian and vehicular traffic flows from Downtown across Fort Point Channel to the district, the Inner Harbor Subdistrict has the potential to become a new public activity destination for residents and visitors. The Inner Harbor already is home to an assortment of nonindustrial commercial uses and there is room for more. With the Financial District just steps away, the Inner Harbor is well-situated to accommodate a portion of the City's unmet demand for office space. The Inner Harbor Subdistrict's proximity to the convention center makes it a prime location for hotels that will serve the general public as well as convention center visitors. In addition, to ensure the development of a true Inner Harbor neighborhood, residential uses must be encouraged alongside office, retail and hotel uses. Fan Pier Cove is a suitable location for a variety of new public water-related facilities and activities such as new public access piers, public marinas and water transit facilities. The area's large piers with deep-water access can accommodate larger boats and more extensive water transit and other boating activity. The substitutions and offsets developed for the Inner Harbor Subdistrict are designed to build out this area to meet the planning principles of the Public Realm Plan.

- **Promote Access to Boston Harbor as a Shared Natural Resource**

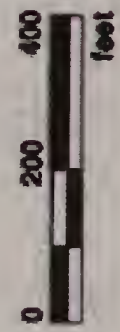
With frontage on two bodies of water, development of the Inner Harbor Subdistrict will have a direct effect on the public's access to the waterfront. Future development efforts must create a public realm that draws people to the waterfront and welcomes them as they arrive. Creating activation of the watersheet is the key to making the Inner Harbor Subdistrict a truly special place that the general public will want to use. In addition to activities on the water, there must be seating, tables, landside activities and programming, cultural uses and civic spaces. Public uses on the ground floor of new buildings must attract residents, workers and visitors, and provide them with a respite during the colder months. A certain density, of both commercial and residential development, is required to create an atmosphere and level of activity that will make the public feel that the area does indeed belong to them.

- **Preserve and Enhance the Industrial Port**

The boundary of the MHP Area was drawn outside the Marine Industrial Park, and not purposely not to include existing marine industrial uses. There is, however, still a very strong role for the subdistrict to play in the preservation and enhancement of the industrial port. Access is critical to the health of the industrial port, and a large percentage of port truck traffic passes through the Inner Harbor Subdistrict. Future development of this area must not be permitted to impede access to the port. Although the completion of the South Boston Haul Road, the Ted Williams Tunnel, the Turnpike extension and new access to the Expressway will dramatically improve access to the industrial port, the City and Massport



FIGURE 10 - 1. INNER HARBOR
Municipal Harbor Plan Area



Boston
Redevelopment
Authority

continue to explore new ways to strengthen access to these areas. The South Boston Transportation Study identifies new Northern Avenue as a key truck connection, and calls for improved access to the Boston Marine Industrial Park and a new connection to the bypass road.

- **Plan the District as a Vital, Mixed-Use Neighborhood**

One of Boston's greatest strengths has always been its neighborhoods. We want the South Boston Waterfront District to develop as something more than a commercial district that lies dark at the end of every workday. Boston has the opportunity to create a new place where people can work *and* live. New residential uses in the Inner Harbor Subdistrict can contribute much to help us reach this goal and will complement the already existing residential community in the adjacent Fort Point Historic Subdistrict and in South Boston. Above all, a neighborhood requires residents in sufficient numbers to create a community. Because an area's residential presence is strongest outside of regular business hours, a residential community will contribute a vitality to the district that a mostly commercial district cannot. A residential population will help to support neighborhood-oriented retail shops and small businesses. Residents also provide a caretaking role of many of the things that make an area attractive to the public, such as the condition of the parks, playgrounds, streets, sidewalks and public spaces. If you create a place where people will want to live, and include well-designed, publicly-accessible areas, you create a place where people will want to go.

- **Develop the District as an Integral Part of Boston's Economy**

It is important to maintain the South Boston Waterfront District's diverse economy even as we expand the presence of certain economic sectors within the district. Because of the Inner Harbor Subdistrict's location between the downtown and the convention center, new development will provide additional support for the City's strong financial services and tourism sectors by providing new offices, hotels, civic spaces, retail shops and restaurants. Because physical connections enhance economic connections, and vice versa, all of the infrastructure improvements that have been made or planned to create public transit, pedestrian, water transit and vehicular connections between the South Boston Waterfront District and other neighborhoods will only help to forge strong economic ties as well.

- **Enhance the South Boston Community**

The development of the South Boston Waterfront District will affect all neighborhoods of the City, but none more than the South Boston residential community which lies immediately to the south of the district. As one of the subdistricts identified for more intensive development, the build-out of the Inner Harbor Subdistrict will generate significant housing and jobs linkage funds that will benefit the South Boston community directly. Enhanced connections between South Boston and the Harbor, particularly along D Street and the Enhancement Zone, also will connect the South Boston community to the

Inner Harbor and the remainder of the waterfront and its array of activities, public places and benefits.

10.2 DEVELOPMENT GUIDELINES FOR MAJOR DEVELOPMENT PARCELS IN THE INNER HARBOR SUBDISTRICT

The heart of the Inner Harbor Subdistrict consists of several major privately-owned development parcels: Fan Pier, Pier 4 and the land owned by the McCourt/Broderick entities. Although only small portions of the McCourt/Broderick holdings are in the MHP Area, and none are located directly on the water, many of the principles discussed in this section are equally applicable to these parcels. The Barking Crab site, also located in the Inner Harbor Subdistrict, is such a unique site that it is addressed separately with respect to substitutions and offsets in Section 10.7.

10.2.1 Water-Dependent Use Zone

The purpose of the water-dependent use zone is to maintain sufficient space along the water's edge to support the site's water-dependent activities, including public access. A high level of activation is planned for the watersheet of the Inner Harbor Subdistrict. New public access piers, public marinas, water transit facilities and a variety of boating activities on the water are planned for the watersheet, and all manner of supporting activities are planned for the landside. We have developed substitute water-dependent use zones for the Fan Pier and Pier 4 that will be more conducive to the water-dependent uses planned for these sites.

For both Fan Pier and Pier 4, we have reconfigured the water-dependent use zone without reducing the overall setback area. The water-dependent use zone under the Waterways Regulations for Fan Pier, shown in Figure 10-2, varies from 100 feet along the fan edge and the side of the fan, to 35 feet at the cove edge along Parcel J, for a total setback area of approximately 147,422 square feet. The reconfigured zone, shown in Figure 10-3, establishes a water-dependent use zone ranging from 140 feet at the fan edge, to 50-65 feet along the cove edge, to 20 feet around Parcel J (the Civic Site), for a total setback area of approximately 174,208 square feet. The water-dependent use zone for Pier 4 under the Waterways Regulations, shown in Figure 10-2, is 100 feet along the end of the wharf and approximately 26 feet along the sides of the wharf, for a total setback area of approximately 61,697 square feet. The reconfigured water-dependent use zone, shown in Figure 10-3, establishes a minimum 200-foot setback along the seaward edge of the site, and smaller zones ranging from 18 to 30 feet along the sides of the site, maintaining a total setback area of approximately 61,697 square feet.

The Waterways Regulations permit a municipal harbor plan to specify alternative setback distances and other requirements which ensure that new buildings for nonwater-dependent use are not constructed immediately adjacent to a project shoreline, in order that sufficient space along the water's edge will be devoted exclusively to water-dependent activity and



Figure 10-2 Fan Pier, Pier 4 and McCourt / Broderick Chapter 91 Heights and Water Dependent Use Zone



Figure 10-3 Fan Pier, Pier 4 and McCourt / Broderick Substitution Provisions

public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(c).

With respect to the reconfigured water-dependent use zones at these two locations, it is possible to offset decreases in the water-dependent use zone with corresponding increases on the same site without undercutting the rationale for the substitution. In fact, the offset for the reconfigured water-dependent use zone is, in essence, built into the substitution. Because there is no net loss in setback area, each reduction in the setback is offset on site by a corresponding increase on site. Irrespective of the numbers, our focus in reconfiguring the water-dependent use zones at these two sites was to develop water-dependent use zones more suitable to these unique sites than is obtained through the application of the standard Waterways formula. In each case, as required by the Waterways Regulations, the substitute water-dependent use zone is configured to ensure that new buildings for nonwater-dependent use are not constructed immediately adjacent to a project shoreline, in order that there is a sufficient and appropriate amount of open space along the water's edge to accommodate the water-dependent uses planned for the site with comparable or greater effectiveness than the Chapter 91 configuration.

10.2.2 Building Height

An important urban planning objective for this district is to ensure that the area will support vigorous levels of public use throughout the day and evening by providing a balanced mix of uses at a sufficient density to generate activity and create a functioning urban neighborhood. An equally important objective is to create an urban design scheme that supports such density in a manner that preserves an inviting and pedestrian-friendly street-level environment. This is the driving force behind the design principles set forth in the Public Realm Plan: small blocks reflective of Boston's scale and urban design character; view corridors to the waterfront; base building elements which create street walls to frame a low-scale pedestrian environment; and slender upper elements which are set back from the street wall edge to minimize the impacts of massing while achieving appropriate density. A secondary goal of the urban design scheme is to allow a mix of buildings heights and typologies within this framework that avoids an undue uniformity and monotony.

The City's own planning efforts with respect to the Inner Harbor Subdistrict, as well as its review of the development proposals advanced by landowners in the area, have led to the conclusion that an appropriate density for Inner Harbor MHP Area would result in a floor area ratio ranging from 5.0 to 5.5. At this level of development, the dimensional rules of the Waterways Regulations would impose an urban design scheme on this area that is completely antithetical to the objectives of the Public Realm Plan. As shown in Figures 8-6 and 8-7, the Waterways Regulations would drive development plans towards a repetitive series of lower and more massive buildings in the manner of more suburban, office and business park models.

The City, therefore, has developed an alternative series of heights for the major development parcels in the Inner Harbor MHP Area that will better achieve the multiple goals of urban density, street-sensitive urban design and variation in building forms. The heights, shown in Figure 10-3, range from no build zones of varying depths at the water's edge to a maximum of 300 feet for one building located furthest from the water.

The new heights follow the principle of "stepping back" from the waterfront that is contained in both the Waterways Regulations and in the Public Realm Plan. With respect to the Fan Pier site, the determination was made to require that the overall build-out of the site approximate the massing of a hypothetical "full build-out" of the area that would be achieved in strict conformity with the height, open space and waterfront setback rules of the Waterways Regulations. Thus, use of the height substitution for the Fan Pier will not be allowed to result in any significant increase in the intensity of development on this prominent waterfront parcel, but will simply allow the permitted (and appropriate) density to be developed under a vastly superior design scheme. With respect to Pier 4, the alternative height zones will allow a density of development consistent with the Fan Pier, a much more appropriate outcome than would be obtained by the mechanical application of the Waterways Regulations to this smaller, unusually-shaped parcel. In each case, the height substitution proposed here will also require compliance with the following criteria:

- a. No building may exceed 300 feet;
- b. For projects located north of old Northern Avenue, the average building height must not exceed 150 feet (taking into account base elements and upper elements);
- c. Buildings must include a street wall no greater than 75 to 85 feet in height;
- d. Tower elements may not exceed a floorplate of 25,000 square feet;
- e. Negative impacts to the pedestrian-level environment must be offset in accordance with Sections 8.8 and 8.9; and
- f. A project must fulfill all the requirements of Boston Zoning Code Article 80 Design and Development Review and Planned Development Area provisions, including providing public benefits determined by the BRA for the approval of building heights in excess of 150 feet.

The Waterways Regulations require that a Municipal Harbor Plan with height substitutions contain "alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith, as appropriate for the harbor in question". The alternative height limits proposed in the Municipal Harbor Plan do ensure that buildings at the waterfront will be modest in size when compared to the Chapter 91 requirements and the existing and planned built environments in the vicinity.

The planning and design principles set forth in the Public Realm Plan provide the framework for these proposed height zones and criteria. A base podium height of 75-85 feet will continue the predominant form of the nearby Boston Wharf district. Elements

rising above the base heights will be distinguished from the base by cornice lines, materials and setbacks. In order to establish a pedestrian scale and maintain views and a sense of openness, the floor plates of upper elements will be limited to 25,000 square feet. The permitted heights will step up as the site moves back from the Harbor's edge, maintaining the tradition of Boston's waterfront neighborhood heights stepping back from the water and creating a mid-scale district as opposed to recreating the downtown Financial District. Building massing will be designed to ensure adequate light and sunshine for the surrounding watersheet and waterfront areas, especially during the periods of the year the site would be most actively used by the public.

At the Fan Pier the substitution will allow a density comparable to that permitted by strict application of the Waterways Regulations. At the other, smaller parcels such as Pier 4, the substitution will allow a density similar to that at the Fan Pier, instead of an artificially constrained calculation of massing resulting from the unusual configuration of land and water in the "Piers" section of this district. In each case, the allowed heights will be modest with respect to the development envelopes in the neighboring Financial District (for example a maximum height of no more than 300 feet, as opposed to 600 feet).

The allowed heights, together with other provisions of the Municipal Harbor Plan, will ensure conditions conducive to water-dependent activity and public access. The wind and shadow standards will prevent the occurrence of extreme conditions that would actively discourage people from using the waterfront. Shadow impacts of the Municipal Harbor Plan heights that are in excess of the Chapter 91 heights must be offset. Offsets for height impacts in the Inner Harbor Subdistrict are one instance when a corresponding reduction in height in or near the site cannot be accomplished without undercutting the rationale for the substitution. Accordingly, offsets for height in the Inner Harbor Subdistrict are focussed on increasing the performance standards under other numerical provisions of the Waterways Regulations, or on qualitative measures, as may be appropriate for the particular site.

10.2.3 Offsets for Impacts of Height Substitutions in the Inner Harbor Subdistrict

Appropriate offsets for shadow impacts depend on the size and location of a particular site. What is appropriate for the Inner Harbor may not be appropriate for the Fort Point Historic Subdistrict, and what is appropriate for Fan Pier may not be appropriate for Pier 4 or the Barking Crab. Although this Municipal Harbor Plan includes height substitutions of various magnitudes for large and small development parcels, the performance standards that we have developed to offset shadow impacts are appropriate only for large development parcels that have a great deal of flexibility in the design and programming of their sites. Offsets for shadow impacts for infill parcels are addressed separately.

The Fan Pier and Cove are among the crown jewels of the South Boston Waterfront, and the public realm should reflect this standing. The sheltered waters of the Cove can provide the public with many water-dependent and water-related transportation, recreation and education opportunities. The open spaces can be areas for people to sit or stroll and enjoy

the Harbor, or to congregate for performances and festivals. Ground floor interior spaces can support these outdoor activities and provide shelter during inclement weather. Although the Waterways Regulations include many specific provisions geared towards enhancing public access to the waterfront and activating the watersheet and waterfront areas, the need to offset negative impacts of substitute provisions gives us the opportunity to require a proposed project to provide structures and strategies designed to activate a site in excess of what otherwise may be required under the Waterways Regulations and which further the City's goal of developing a vibrant, active, urban waterfront neighborhood.

The standard for height substitutions under the Waterways Regulations reflect a concern that the pedestrian level environment remain conducive to water-dependent activity. Specifically, height substitutions are permitted in a Municipal Harbor Plan provided the plan specifies "alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith." 310 CMR 9.51(3)(e). The shadow analysis that we conducted allows us to estimate shadow impacts caused by the height substitutions that are in excess of the shadow impacts of the Chapter 91 build-out. The program of offsets developed for the Inner Harbor are designed specifically to offset these additional shadow impacts.

From the list of possible offsets in Section 8.9, below are the types of public benefits that we believe appropriately offset the negative impacts of shadow. Full descriptions of these benefits, including specific criteria proposed projects must meet in order to qualify as an offset, are in Section 8.9. Because each square foot of net new shadow results in a diminishing of the pedestrian environment to some degree, each square foot of net new shadow must be offset by the provision of some amount of public benefit from the list below. We are mindful that certain of these amenities are more valuable than others in terms of the scarcity of the resource and the uniqueness of the experience that they will provide. We also considered whether there were particular benefits that are more critical to the development of the area than others and wanted to create additional incentives for property owners to provide. We have developed performance standards for each of these benefits that take all of these factors into account.

It is not until the Article 80 and MEPA review processes that the actual level of shadow impacts of a proposed project are analyzed. Once the level of impacts is known, it must be offset in accordance with the formulas shown below. Because appropriate offsets will vary from site to site, in the sections that follow we identify the particular offsets that particular sites should at a minimum include. The actual level of offset will not be determined until an actual project goes through the City and State project review processes. To the extent that the level of offset an actual project provides from the performance standards is insufficient to offset the full level of impact, additional qualitative offsets must be provided.

Additional Open Space. Open space is the public benefit most often cited as desirable in waterfront areas. In order to create incentives for property owners to include additional open space in their projects, open space in excess of the 50% required by the Waterways Regulations which meets the criteria in Section 8.9 may be counted at a ratio of 2:1 to offset shadow impacts (i.e., each square foot of additional open space may be used to offset two square feet of net new shadow).

Civic, Cultural and Educational Facilities. Civic uses are vital to the development of a true neighborhood, and cultural uses provide people with reasons to come to an area regardless of the time of year or weather. Because of their importance to the development of the Inner Harbor as a neighborhood and as a destination, we wanted to provide developers with incentives to provide this benefit. Accordingly, space devoted to civic, cultural and educational facilities may be counted at a ratio of 1:1 to offset shadow impacts (i.e., each square foot of offset may be used to offset one square foot of net new shadow).

Four-Season Rooms. We view four-season rooms as interior open space, and our goal is for these spaces to function in that fashion. They should receive the same high quality design considerations as all other interior and exterior spaces of projects on the waterfront and may be located on an upper floor or ground floor of a project. Accordingly, we value these spaces at a ratio of 1:1 to offset shadow impacts (i.e., each square foot of offset may be used to offset one square foot of net new shadow).

Upper Floor "Active" Facilities of Public Accommodation. Facilities of public accommodation are important to the activation of any area. Ground floor facilities of public accommodation are required by the Waterways Regulations, but facilities of public accommodation located on upper floors also can help to activate an area. Restaurants and retail facilities, however, are not particular to a waterfront area and will bring less to the waterfront than some of the other types of benefits or special destination facilities. Accordingly, we value spaces devoted to upper floor facilities of public accommodation at 0.25:1 (i.e., each square foot of offset may be used to offset one square foot of net new shadow).

Public Water-Related Facilities. Another possible offset is the provision of water-dependent and water-related public facilities such as those listed in the Waterways Regulations beyond what would be required of the project under the Chapter 91 regulations. We are particularly interested in obtaining new public piers and float systems that will function as additional public open space over the water. This would provide an opportunity for people to have a different and much more intimate relationship to the water. We value these types of facilities at a ratio of 1:1 to offset shadow impacts (i.e., each square foot of offset may be used to offset one square foot of net new shadow).

Qualitative Offsets. To the extent that offsets provided by a project using the above performance standards are insufficient to offset shadow impacts generated by a project, additional qualitative offsets from the list below must be provided.

Water Transportation Subsidy or Service. The promotion of a broad array of water transit options is one of the City's priorities throughout the Harbor, and a primary strategy for activating both the watersheet and the water's edge. This is a particularly attractive offset option for locations with little opportunity to include offsets on site. Water transportation is a broad term that includes commuter service, excursion service, Cultural Loop service, as well as water taxi service. Of particular importance to the City is the operation of the Cultural Loop, as defined in the Water Transportation Plan.

Public Water-Related Facilities. Not all water-related facilities can be valued in terms of square-footage of accessible area. There are other types of investments in water-related facilities that we would like to see in the Inner Harbor, such as handicapped accessible dockage. Other possibilities include educational or historic vessels. Such facilities would likely be in excess of the level of water-related benefits that is required under Chapter 91 and, if so, would be eligible to be counted as offsets.

With the exception of additional public recreational open space, all benefits are valued at 1:1 or less, that is, each square foot of additional benefit may be used to offset one or less than one square foot of net new shadow. Because a square foot of net new shadow does not render a square foot of open space or watersheet unusable, concerns have been raised that these performance standards are too stringent. We, too, agree that the performance standards will generate offsetting benefits that are more than sufficient to compensate for the net new shadow impacts of the MHP heights. Shadow, however, is not the only impact to the pedestrian level environment caused by increased heights. The MHP heights also have the potential to create additional wind impacts, although, as discussed above, they appear to be very minor. It is our view that the performance standards developed above are sufficient to offset the cumulative effects of wind and shadow on public use and activity at the waterfront.

10.3 FAN PIER: SUBSTITUTIONS AND OFFSETS **(Substitutions: Water-Dependent Use Zone, Height)**

The Fan Pier parcels, shown in Figures 10-2 and 10-3, include almost 1,000,000 square feet of land area and watersheet. The Public Realm Plan envisions the Fan Pier as a highly active new destination on the South Boston Waterfront. Likewise, the Fan Pier Cove is slated to be an exciting new public area with new public piers, docks, walkways, seating areas, recreational boat rentals and water transportation. Significant density of development is required to create and support the new neighborhood that the Inner Harbor Subdistrict will become. The BRA has proposed a program of substitutions and offsets for the Fan Pier designed to promote a mix of uses, a mix of heights, new north-south and east-west view corridors, and public use and activity throughout the site.

Planning for the Fan Pier site is well-advanced. On November 15, 1999, a Project Notification Form/Environmental Notification Form was filed with the BRA and the Commonwealth's MEPA office detailing a proposed redevelopment of the Fan Pier and

Cove area. In January 2000, the BRA and MEPA both issued scopes for the proposed project. On April 18, 2000, the Draft Environmental Impact Report/Draft Project Impact Report was filed for the redevelopment proposal. As a result, the Fan Pier project review process is on an almost parallel track as the development of this Municipal Harbor Plan.

The advanced state of planning for the Fan Pier permits this Municipal Harbor Plan to obtain a level of specificity that is not possible for other sites in the MHP Area. This, in turn, has benefited the municipal harbor planning process by enabling us to test many of the new standards that we have developed for this Municipal Harbor Plan on an actual project. By testing a number of different ideas, we have been able to develop and refine standards that will ensure that the public's rights in the tidelands are not just respected but enhanced by new development in this area.

10.3.1 Fan Pier Substitution: Water-Dependent Use Zone – 310 CMR 9.51(3)(c)

A high level of activation is planned for Fan Pier and Fan Pier Cove. New public access piers, public marina, water transit facility and a variety of boating activities are planned for the watersheet, and all manner of supporting activities are planned for the landside. We have developed a substitute water-dependent use zone for the Fan Pier site that reconfigures but does not diminish the area of the setback and will be more conducive to the water-dependent uses planned for the site.

Fan Pier Water-Dependent Use Zone Substitution. The water-dependent use zone under the Waterways Regulations for Fan Pier varies from 100 feet along the fan edge and the side of the fan, to 35 feet at the cove edge, for a total setback area of approximately 147,422 square feet. The water-dependent use zone calculated under the Waterways Regulations is shown in Figure 10-2. The reconfigured zone, shown in Figure 10-3, establishes a water-dependent use zone ranging from 140 feet at the fan edge, to 50-65 feet along the cove edge, to 20 feet around Parcel J (the Civic Site), for a total setback area of approximately 174,208 square feet. The setback area under the substitute configuration is more than one-half acre (approximately 26,786 square feet) larger than the setback area under the Waterways Regulations.

Fan Pier Water-Dependent Use Zone Substitution Analysis. The Waterways Regulations permit a municipal harbor plan to specify alternative setback distances and other requirements which ensure that new buildings for nonwater-dependent use are not constructed immediately adjacent to a project shoreline, in order that sufficient space along the water's edge will be devoted exclusively to water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(c). As demonstrated below, the substitute configuration of the Fan Pier's water-dependent use zone meets this standard.

Fan Pier, with over 1700 linear feet of waterfront, is precisely the type of site that will benefit from reconfiguration of its water-dependent use zone. The vision of an active waterfront requires a high level of activity on both the landside and the waterside to make

this vision a reality. The Municipal Harbor Plan configuration is superior to the Chapter 91 configuration in the manner and the extent to which it devotes sufficient space along the water's edge for the water-dependent activities that are appropriate for the site, including expanded opportunities for public waterfront access.

Fan Pier Cove. The protected nature of the Fan Pier Cove makes it ideally suited for a variety of watersheet uses. The Public Realm Plan and the Water Transportation Plan together provide a vision for the future of Fan Pier Cove – a highly active body of water with public boardwalks, docks, landings, piers and a new water transit facility. As described in the Public Realm Plan, the Fan Pier bulkhead can accommodate intermittent docking for larger excursion or tour boats, historic vessels and the like. As further described in the Water Transportation Plan, a new terminal at Fan Pier should accommodate a mix of commuter, excursion and water taxi vessels, with the excursion vessels sited outboard and the more time-sensitive commuter vessels close to landside. A new pier in the middle of the Fan Pier Cove can accommodate the ferry terminal while also providing a protected waiting area for passengers and additional open space. Both sides of the terminal/pier should be available for active dockage. The edges of the Cove area appropriate for small-scale marina uses and in particular public transient dockage for short stays of a few hours, a day or a week. The Cove edges are also appropriate for the dockage of educational vessels and temporary floating barges for public events.

As shown in Figure 10-4, the proposed Fan Pier project has interpreted the City's plans for Fan Pier Cove in a highly creative manner that maximizes watersheet use. The Fan Pier development contemplates the dredging of the Fan Pier Cove, 700-foot long public fishing pier that also will serve as a breakwater/wave attenuation structure, and installation of a series of docks and piers that will provide infrastructure comparable to the most significant existing water transportation centers in Boston Harbor (Rowes Wharf and Long Wharf, both of which are currently overcrowded). Water transit will be provided as well as dockage for excursion boats and Inner Harbor connections to the Harbor Islands. The Fan Pier development also contemplates a significant recreational boating component in the Fan Pier Cove. The docking facilities will provide opportunities for transient docking by recreational boaters as well as for charter fishing excursion, both of which are currently in short supply in Boston Harbor. The fishing pier, which was conceptualized in the Public Realm Plan, is to be located at the end of the fan and extends across the Cove. It has been designed beyond that which would be minimally necessary to make the Cove more tenable for dockage, maximizing the capacity of the Cove and its suitability for smaller boats. The pier, which is fully accessible to pedestrians, will not only be available for on-shore fishing, an important opportunity in the cleaner waters of Boston Inner Harbor, but also will provide supporting facilities like fish cleaning stations, pole rentals and bait supply.

It is critical that in crafting a new water-dependent use zone we maintain sufficient space along the water's edge to support the watersheet uses planned for an area. The infrastructure required by the myriad of uses described above can be accommodated by either the Chapter 91 configuration or the Municipal Harbor Plan configuration of the site's water-dependent use zone. Infrastructure is only one component of a successful



Figure 10-4 Proposed Fan Pier Project Site Plan

waterfront activation strategy. Equally important is the manner and extent to which the water-dependent use zone accommodates, and if possible, expands opportunities for water-dependent activities along the water's edge. The Municipal Harbor Plan configuration, as discussed below, surpasses the Chapter 91 configuration in this critical respect.

The Fan Edge. The Municipal Harbor Plan configuration, shown in Figure 10-3, will allow a concentration of open space along the most seaward edge of the Fan Pier – the fan edge. The setback of 140 feet along the fan edge will create an open space of approximately 80,666 square feet, instead of the approximately 57,286 square feet obtainable under the Chapter 91 configuration. A larger water-dependent use zone is appropriate at this location for several reasons. Because active berthing uses are not planned for the fan edge, supporting landside uses can be more effectively located at other areas of the site. This allows us to create a larger public open space at the location where people most appreciate it – as far “out” as possible. The Municipal Harbor Plan configuration also makes it possible to accommodate the 5,500 square foot tidal pool that Fan Pier owners are developing in consultation with The New England Aquarium. The new tidal pool will be an important educational resource, highlighting the tide and marine life and lifecycles along the northeast coastline. Finally, the larger water-dependent use zone makes it possible to incorporate a public street between the buildings and the fan edge, while still providing ample open space for more passive forms of recreation. A street at this location is important for providing public access to public spaces and the water's edge. Even more important, by separating private uses from public open spaces, we ensure that the public open space *feels* public. It is the network of local streets and sidewalks that is the essence of Boston's public realm and what enhances Boston as a walkable city.

The Municipal Harbor Plan configuration also creates a contiguous open space along the fan and cove edges that can accommodate public events of various sizes. Concerts and movie screenings can be accommodated at several locations, using temporary floating stages and movie screens. By closing the public streets along the fan and cove edges, you create a flexible open space that can accommodate large public festivals similar in size to Harborfest or the Jimmy Fund's Scooper Bowl. It goes without saying that when the Fan Pier project is permitted and built, it will provide unparalleled landside viewing of waterside events, such as Sail Boston 2000, as well as supporting public amenities. Flexible open spaces such as these increase public access opportunities by supporting a variety of public activities and programming options that will attract people to the water's edge throughout the year.

The Cove Edges. The Municipal Harbor Plan configuration also permits smaller setbacks along the Cove edge, which can help to bring ground floor public uses closer to the water's edge. The Waterways Regulations permit the location of uses that support water-dependent activities, such as ticketing facilities and waiting areas for water transit, to be located in a site's water-dependent use zone. We prefer, however, to incorporate these and other public uses into mixed-use structures. This strategy has several advantages. First, it enables us to maintain larger waterfront open space areas that are unbroken by structures of any kind, yet still provide supporting landside uses at a convenient distance to the

watersheet. Second, it helps us to create stronger connections between interior public spaces, the waterfront and the watersheet, thereby increasing opportunities for a variety of waterfront experiences that will attract people to the area throughout the year.

The Harbor Hall included in the Fan Pier development illustrates both of these points.

Harbor Hall is a 10,000 square foot, two-story, glass-enclosed waterfront public interior open space that will be located adjacent to the open space referred to as the Public Green (Block G) by the project proponent. See Figure 10-4. Harbor Hall will include, among other things, public restrooms, ticketing facilities, a waiting area, café and take-out food service, tables and benches. The layout of Harbor Hall forms a direct connection for water transportation users from the nearest public way to the water's edge and the layout of the adjacent Public Green provides a direct and clear view of the water transportation dock and boats. These features, which are not found at other existing water transportation sites on the Harbor, will provide a high level of visibility of the availability of water transportation to passers-by on public streets and sidewalks. The smaller water-dependent use zone at this location also will shorten the distance that commuters need to travel from the enclosed waiting area to the boats. Most importantly, Harbor Hall will be free and open to the public and creates a special destination that exceed the basic criteria for facilities of public accommodation.

Harbor Hall is intended to function as an extension of the adjacent public green, providing people with an expansive interior space for passive recreation at the water's edge. It is, of course, important to provide generous outdoor spaces devoted to waterfront recreation, but it is also important to provide sheltered, indoor public spaces which allow people to experience the water and the waterfront during inclement weather or during the colder months. The building is being designed so that the glass walls that front onto the public green area can be opened in good weather, providing a contiguous indoor/outdoor public space, and much needed shaded areas during the warm summer months. Bringing interior public spaces closer to the water in key locations, and creating strong connections between waterside and landside uses, increases our ability to support watersheet uses and expands opportunities for public waterfront access by activating the waterfront throughout the year, not just during the warmer months.

The Civic Site. A reconfigured water-dependent use zone will make it possible to house a significant cultural use on Parcel J of the Fan Pier site. The owners of the Fan Pier have dedicated a 29,000 square foot waterfront parcel to the City for a civic use. This parcel is shown as Parcel J in Figure 10-3. The Boston 2000 Working Group, convened by Mayor Menino to identify a civic project for Boston, selected Parcel J because of its prime waterfront location and recommended the Institute of Contemporary Art as the entity that will occupy the site. We have established the parameters of a building envelope that would be suitable for a variety of cultural and civic uses. Whether the eventual user is the ICA, as proposed, or another cultural or civic institution, the site is intended to be a major public destination in the Inner Harbor, drawing people to the area and supporting other public uses. It is critical that the building envelope be large enough to accommodate a program of significant size.

Fan Pier is comprised of several large parcels. Because the dedication to the City of the Civic Site has not yet taken place, technically the Civic Site is still a portion of a much larger parcel, but it will become a separate parcel. The water-dependent use zone for the parcel that includes the Civic Site ranges from 35 feet to 100 feet, which renders the Civic Site essentially an unbuildable lot. The substitute water-dependent use zone for this location is 20 feet.

Water-dependent uses are planned throughout the Fan Pier Cove, including water transit uses, accommodations for excursion vessels, public landings and docking space and public piers. In accordance with the Water Transportation Plan and sound planning principles, many of these uses are accommodated elsewhere in the cove. The watersheet immediately surrounding the Civic Site is envisioned primarily for public pedestrian access, possibly with access to public floating structures, public landings and docking space. Both the Chapter 91 and substitute water-dependent use zones can accommodate Harborwalk and any infrastructure necessary to accommodate planned watersheet uses at this location.

The substitute water-dependent use zone at this location is superior to the Chapter 91 water-dependent use zone in the extent to which it will promote public access to the waterfront area. A significant cultural institution such as the ICA will give residents and visitors a reason to come to the water's edge throughout the year. Attendance at the new facility is projected at 200,000 visitors per year. It also will support other public uses in the area and may encourage the location of other significant cultural or civic institutions nearby, which, in turn, will draw more people into the area. In addition, whatever the eventual use, a portion of the ground floor of the structure will be open and available to the public without paying any fee for admission. The ICA or other eventual user should be creative in incorporating exhibits with seating areas and other amenities in these free public spaces. The goal is for this portion of the ground floor to connect with other public amenities and spaces nearby, both interior and exterior, and to connect with and celebrate the mission of the institution.

Offsets for Impacts of Fan Pier Water-Dependent Use Zone Substitution. At Fan Pier, it is appropriate to offset negative impacts of the substitute water-dependent use zone with an in-kind quantitative offset of the same numerical requirement on the same site. In keeping with this principle, each decrease in the depth of the setback on the Fan Pier property created by the reconfiguration is offset by a corresponding increase elsewhere on the site, thereby maintaining the same overall setback area. As demonstrated above, the substitute water-dependent use zone ensures that "new buildings for nonwater-dependent use are not constructed immediately adjacent to a project shoreline, in order that sufficient space along the water's edge will be devoted exclusively to water-dependent activity and public access associated therewith, as appropriate for the harbor in question." 310 CMR 9.51(3)(c). Moreover, as demonstrated above, the reconfigured water-dependent use zone devotes a sufficient and appropriate amount space along the water's edge to accommodate the water-dependent uses planned for the site with greater effectiveness than the Chapter 91

configuration, thereby meeting the regulatory standard of approval for this substitute provision.

10.3.2 Fan Pier Substitution: Building Height – 310 CMR 9.51(3)(e)

Height, often one of the most vigorously debated of the possible substitutions, also is arguably one of the most important elements to the creation of a vital and exciting waterfront area with a distinctly urban character. Because the ground plane must provide open space and public uses, view corridors, pedestrian access, support for water-dependent uses, high quality design and small blocks, higher heights are necessary to achieve the density needed to create a new neighborhood. The Chapter 91 heights for Fan Pier, shown in Figure 10-2, range from 55 feet along the water-dependent use zone to almost 300 feet at the corner of old Northern Avenue and Courthouse Way. We have developed a new series of heights for the Fan Pier, which together with the general height criteria defined in Section 10.2.2, will ensure that new buildings will remain relatively modest in size, as appropriate for this portion of Boston Harbor.

Fan Pier Height Substitution. The substitute heights for Fan Pier are illustrated in Figure 10-3. From the fan edge, after the 140-foot water-dependent use zone, heights rise from 175 feet to 250 feet to 275 feet to 300 feet at the corner of old Northern Avenue and Courthouse Way. Along the cove, the substitute height for Parcel J is 60', and for the two building parcels east of the Public Green, substitute heights are 250'.

Fan Pier Height Substitution Analysis. The massing, wind and shadow analyses we have conducted allow us to evaluate the impacts of substitute height provisions so that we can ensure that ground level pedestrian conditions remain conducive to water-dependent activity and public access. By estimating the massing, wind and shadow impacts of a representative build-out under the Municipal Harbor Plan height substitutions, and the extent to which they exceed the impacts of a Chapter 91 build scenario, we are able to understand the negative impacts to the ground level environment and ensure that they will be offset by appropriate measures that will encourage water-dependent uses and public access. The Chapter 91 and MHP massings used for the analysis are shown in Figures 8-4 and 8-5.

Figure 8-6 depicts a three-dimensional hypothetical build scenario based solely on the Waterways Regulations. The Chapter 91 build-out complies with height, open space, setback and use requirements of the Waterways Regulations which do not reflect local planning and design criteria in their base dimensions. The build-out, therefore, does not take into account the principles of the Public Realm Plan, such as the Urban Design Guidelines, or general requirements developed in this Municipal Harbor Plan, such as limiting tower elements to 25,000 square feet set back on lower street walls. In contrast, the Municipal Harbor Plan build-out, shown in Figure 8-8, takes into account the planning principles of the Public Realm Plan, and the measures developed in this Municipal Harbor Plan to implement the Public Realm Plan.

Massing Analysis. We have often stated that our goal in the Inner Harbor is to create a lively, dense, mixed-use neighborhood. After reviewing the densities of other City neighborhoods, we have determined that an appropriate floor area ratio for the major development parcels in the MHP Area is in the range of 5.0 to 5.5. As we studied possible build-outs of the Fan Pier parcels that are possible under Chapter 91, we learned that the density that we believe is appropriate for the site can be achieved on the site within the constraints of the Waterways Regulations. The Chapter 91 build-out achieves a build-out of approximately 3.2 million square feet of mixed-use development space, which translates to a floor area ratio of approximately 5.2. No substitutions to the Waterways Regulations are required to make this build-out if density were the only criteria. It includes a mix of office, residential, hotel and retail uses, and the first floors of all the buildings are facilities of public accommodation. It does not, however, create a strong urban environment.

At this level of development, the dimensional rules of the Waterways Regulations impose an urban design scheme on this area that is completely antithetical to the objectives of the Public Realm Plan and the Waterways Regulations themselves. The Waterways Regulations drive development plans towards a repetitive series of lower and more massive buildings in the manner of the new Federal Courthouse at Fan Pier. As shown in Figure 8-6, the Chapter 91 build-out is characterized by squat, massive buildings that create large blocks and narrow view corridors. The buildings do step back from the water, as this is mandated by the Waterways Regulations, creating an unusual view of the site from the waterside. The view of Fan Pier Cove from old Northern Avenue, however, is all but completely blocked by these structures.

The MHP build condition, shown in Figure 8-8, depicts a rearrangement of approximately the same level of density on the site in a manner that promotes the twin objectives of the tidelands policies and the policies of the Public Realm Plan. By requiring street walls of 75-85 feet and limiting the floorplate of tower elements to 25,000 square feet, the buildings become taller and slimmer, creating smaller blocks and opening up view corridors. The new heights, like the Waterways Regulations, require lower heights closest to the water-dependent use zone and permit heights to rise as you step back, situating the bulk of the height away from the water's edge. The height limits (no building taller than 300 feet and average building height may not exceed 150 feet) will ensure that the result is a mid-scale district that brokers the transition from the high-rise Financial District to the low-rise neighborhoods. The new heights also will permit a variety of building heights and typologies. The combination of the substitute heights and the height criteria work together to ensure that new buildings for nonwater-dependent use will remain relatively modest in size, when compared to the massive structures that result from strict application of the Waterways Regulations, and the high rises of the nearby Financial District.

Wind Analysis. The standard for height substitutions requires that new buildings for nonwater-dependent use remain relatively modest in size, in order to maintain wind, shadow and other conditions of the ground level environment that will be conducive to water-dependent activity and public access associated therewith, as appropriate for the harbor in question. While the substitute heights are preferable from a planning and urban

design perspective, higher heights can nonetheless have significant wind and shadow impacts.

The Durgin Wind Study compared pedestrian level winds for the representative Chapter 91 and MHP build-outs on the Harborwalk and in major public open space areas. The anticipated uses at each of these locations are various forms of passive recreation, including sitting, standing and walking. A copy of the Durgin Wind Study is contained in Appendix 4.

The Durgin Wind Study indicates that the difference in pedestrian level winds along the Inner Harbor between the Chapter 91 build-out and the Municipal Harbor Plan build-out are negligible. Both build-outs are a marked improvement over the existing, no build condition. For each of the five wind directions included in the study, thirteen locations (8-19, 25) will be most directly affected by build-out at Fan Pier, including the ICA site. Of these 65 coordinates (combination of one wind direction and one location) studied, the MHP build scenario causes an improvement of pedestrian level winds over the Chapter 91 build scenario at four coordinates, and causes a deterioration of pedestrian level wind conditions at six coordinates.

For northwest winds, which are predominant in spring, fall and winter months, wind conditions are primarily Category 1 (Comfortable for Long Periods of Standing or Sitting) and Category 2 (Comfortable for Short Periods of Standing or Sitting) under both the Chapter 91 and MHP build-outs. The Chapter 91 and MHP build-outs improve pedestrian level winds over the existing condition at four locations. At location 19, located on the Pier 4 property at the corner of the Civic Site and Pier 4, the MHP build-out increases pedestrian level winds from Category 2 to Category 3 (Comfortable for Walking). All other locations remain the same for the Chapter 91 build and MHP build scenarios.

For southwest winds, which are predominant in the summer months, wind conditions are primarily Category 1 and Category 2 under the Chapter 91 and MHP build-outs. The Chapter 91 and MHP build-outs improve pedestrian level winds over the existing condition at nine locations. At locations 14 and 15 along the Cove edge, pedestrian level winds deteriorate from Category 1 under the Chapter 91 build to Category 2 under the MHP build condition. At location 25 in the Public Green, the Chapter 91 wind condition is Category 2, while the MHP wind condition is Category 3. All other locations remain the same for the Chapter 91 build and MHP build scenarios.

Easterly winds occur approximately one-third of the time, primarily just before a storm, or in the summer as a light breeze. Northeast winds, which are primarily storm winds, are the most common of the easterly winds. Pedestrian level winds are primarily Category 4 (Uncomfortable for Walking) for northeast winds. These winds occur primarily during a storm when people generally expect windy conditions. At location 17 on Fan Pier Cove near the ICA site, the MHP build-out improves conditions over the Chapter 91 build-out from Category 4 to Category 3. At location 19, the Chapter 91 build-out improves pedestrian level winds over the no build from Category 3 to Category 1, while the MHP

build-out results in Category 2 pedestrian level winds. All other locations remain the same for the Chapter 91 build and MHP build scenarios.

For easterly storm winds, pedestrian level winds are predominantly Category 3. The Chapter 91 and MHP build-outs improve pedestrian level winds over the existing condition at five locations. At location 16 along the Cove edge, the Chapter 91 build results in a Category 2 condition, while under the MHP build, pedestrian level wind conditions deteriorate to Category 3. All other locations remain the same for the Chapter 91 build and MHP build scenarios.

For southeasterly winds, pedestrian level wind conditions are either Category 1 or Category 2. The Chapter 91 and MHP build-outs improve pedestrian level winds over the existing condition at five locations. At locations 14, 15 and 16 along Fan Pier Cove, the MHP build-out improves pedestrian level wind conditions over the Chapter 91 build scenario from Category 2 to Category 1. All other locations remain the same for the Chapter 91 build and MHP build scenarios.

In summary, the MHP build scenario causes an improvement of pedestrian level winds over the Chapter 91 build scenario at four coordinates and causes a deterioration of pedestrian level wind conditions at six coordinates on those occasions when the MHP build condition creates a deterioration of the wind environment. They are increases from Category 2 to 3 (NW/19, E/16 and SW/25) or increase from Category 1 to 2 (SW/14, SW/15 and NE/19). In none of these cases do the increases render the area unsuitable for the planned public uses of the Harborwalk and open space areas of sitting, standing and walking. Moreover, for the three locations that experience an increase from Category 2 to 3, immediately surrounding areas remain at Category 2. Thus, as demonstrated above, the wind impacts of the MHP build scenario compared to the Chapter 91 build scenario are negligible.

Shadow Analysis. As would be expected, the MHP build scenario generates greater shadow impacts than the Chapter 91 build scenario. Although actual impacts depend upon an actual build-out, our representative MHP build-out was useful for studying generally how shadows will impact the open spaces and Harborwalk areas.

Figure 8-10 depicts shadow impacts from the MHP build scenario. At 9:00 and 10:00 a.m., the sun is relatively low in the sky, and long shadows are cast. In the Inner Harbor, shadows stretch to Courthouse Park and beyond, while the proposed Tidal Park, Pier 4 Park and the majority of the Fan Pier Cove remain free from any shadow impacts. The Public Green remains largely in shadow. At 11:00 a.m. and 12:00 p.m., shadows begin to move into the fan edge and the southern portion of the Cove. The park at the end of Pier 4 remains largely free from shadow. At 1:00 p.m. and 2:00 p.m., shadows begin to cover much of the fan edge. Also, approximately one-half of the Cove and Pier 4 Park areas are in shadow. The Public Green, however, is largely free from shadow at this time. At 3:00 p.m., the fan edge is almost completely in shadow, as is more than one-half the Cove. Approximately one-half of Pier 4 Park is in shadow, while the Public Green remains

largely free from shadow impacts. Shadows are beginning to be cast on the watersheet between Pier 4 and Commonwealth Pier. By 4:00 and 5:00 p.m., as the sun is going down, long shadows are cast throughout the area leaving much of the site in shadow, except for the eastern portion of the fan edge.

With the exception of late in the day (from 4:00 p.m. on), some portion of the shadow protection zone remains in sunlight. When the fan edge and Pier 4 Park are in sunlight during the morning hours, the Public Green is shaded. When the fan edge is in shadow beginning in the late morning/early afternoon, Pier 4 remains in sunlight. As the fan edge becomes more shaded, and Pier 4 Park also becomes shaded, the Public Green is largely in sunlight.

A comparative analysis of the shadow impacts of the Chapter 91 build and the MHP build conditions, shown in Figure 8-12 indicates that the MHP build condition generates approximately 253,745 square feet of net new shadow on the focus date of October 23. Each square foot of net new shadow must be offset in accordance with the principles and parameters established in Section 10.2.3.

Offsets for Impacts of Fan Pier Height Substitution. The Fan Pier and Cove are among the crown jewels of the South Boston Waterfront, and the public realm should reflect this standing. The sheltered waters of the Cove can provide the public with many water-related recreational and educational opportunities. The open spaces can be areas where people can sit or stand and enjoy viewing the water or congregate for performances and festivals. Ground floor interior spaces can support these outdoor activities and provide shelter during inclement weather. Although the Waterways Regulations include many specific provisions geared towards enhancing public access to the waterfront and activating the watersheet and waterfront areas, the need to offset negative impacts of substitute provisions gives us the opportunity to require a proposed project to provide structures and strategies designed to activate a site in excess of what otherwise may be required under the Waterways Regulations and which further the City's goal of developing a vibrant, active, urban waterfront neighborhood.

The Fan Pier offsets are a combination of measures that we believe will be effective at counteracting negative impacts to the pedestrian-level environment caused by the substitute height provision for the site. An in-kind numerical offset for the Fan Pier height substitution would undercut the rationale for the substitution, but other types of numerical offsets, such as increased open space, are appropriate. Also, qualitative offsets designed to activate the land and watersheet year-round are particularly well-suited to counteracting the negative impacts of the height substitution.

The standard for height substitutions under the Waterways Regulations reflects a concern that the pedestrian level environment remain conducive to water-dependent activity. Specifically, height substitutions are permitted in a Municipal Harbor Plan provided the plan specifies "alternative height limits and other requirement which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in

order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith.” 310 CMR 9.51(3)(e). As discussed in greater detail above, this plan’s massing criteria ensures that buildings for nonwater-dependent use will be relatively modest in size, and minimize wind and shadow impacts. The wind analysis indicates that the wind impacts of the Chapter 91 and MHP build scenarios will likely be very similar. The shadow analysis indicates that the MHP build scenario will have cast shadow significantly in excess of the Chapter 91 build scenario. The program of offsets developed for the Fan Pier are designed specifically to offset these additional shadow impacts.

Certain of the offsets below are designated as required offsets. Although we do not know the exact amount of net new shadow that will be cast by the proposed Fan Pier project, based on the MHP build scenario, we know that there will be net new shadow, and that it will be a significant amount. Using the net new shadow of the MHP build-out and information from the Fan Pier EIR/DEIR, below we demonstrate the type of analysis developed in Section 10.2.3 that an actual project will be required to perform in the Article 80 and MEPA review processes, including application of the performance standards developed in Section 10.2.3. To the extent that the offsets from the list below are insufficient to offset the full amount of net new shadow, additional qualitative offsets will be required.

Additional Open Space (Required Offset). The Fan Pier EIR/DEIR indicates that the proposed project includes approximately 50% open space. We understand that the project has since been revised and will include approximately 21,000 square feet of open space in excess of the 50% requirement. In accordance with Sections 8.9 and 10.2.3, additional open space that meets the criteria of Section 8.9 can offset shadow impacts on a 2:1 basis.

Civic, Cultural and Educational Facility (Required Offset). The Public Realm Plan encourages property owners to include civic, cultural and educational facilities into their sites in order to create a truly mixed-use district with significant destinations for residents and visitors. The property owner will dedicate a 29,000 square foot waterfront parcel to the City for such use as the City may choose. The floorplate of the structure is anticipated to be approximately 18,000 square feet.

Boston 2000 has recommended that the Institute of Contemporary Art occupy this site. A new ICA facility will help to offset negative impacts on the ground level environment by giving residents and visitors a reason to come to the Inner Harbor year-round. In fact, a use such as the ICA, with its strong program of special exhibitions, also gives residents a reason to return to the area. In addition, a portion of the ground floor, which will contain exhibits, will be open to the public without charge for admission. By dedicating this site to the City, the Fan Pier owners have made it possible to incorporate an attraction in this area that can become a significant draw and play a primary role in year-round activation of the waterfront.

The ICA is precisely the type of civic, cultural or educational facility that we would like to attract to the waterfront area. The property owners may offset shadow impacts with the floor area of the structure provided by the development on a 1:1 basis.

Four-Season Rooms (Required Offset). To complement open space and water-related facilities on the Fan Pier, the property owners will create significant interior public spaces that will be free and open to the public regardless of whether they choose to patronize nearby restaurant or retail establishments. The proposed Fan Pier project includes two of these four-season spaces, one along the Harbor, and one at Courthouse Square.

The project proponents have designated the waterfront space “Harbor Hall” and will incorporate it into the lobby area of the office building (Parcel F) adjacent to the two hotel parcels. See Figure 10-4. This interior space will include seating, ticketing facilities for water transit, food service and other public amenities. This space will be a two-story atrium area, and comprise approximately 10,000 square feet of the building’s floorplate. An additional 3,000 square feet of public space will be located on a mezzanine level. The glass walls of the Harbor Hall will open onto the public green, providing shaded seating areas as an extension of the Public Green in the warm summer months. In the cold weather, the walls will be closed, providing people with warm places to wait for a water shuttle or sit and relax.

A second public four-season space of approximately 15,000 square feet will be located in the Grand Hyatt hotel at the junction of old Northern Avenue and Courthouse Way (Parcel A) at Courthouse Square. See Figure 10-4. Similar to Harbor Hall, Courthouse Square will be a multi-level public space, with public seating, and cafés, with a portion of the atrium area fully open to the exterior in good weather. The Courthouse is the first building that many will see when crossing over into the South Boston Waterfront, and an active, inviting public area will function as a gateway to the Fan Pier site and beyond.

Based on the descriptions of these spaces contained in the EIR/DEIR, both the Harbor Hall and the Grand Atrium meet the criteria of four-season rooms established in Section 8.9. Accordingly, these four-season rooms may be used to offset shadow impacts on a 1:1 basis.

Public Water-Related Facilities (Required Offset). The Fan Pier project includes an extensive breakwater/wave attenuation structure. Full use of the cove area can be achieved without this structure, but it will make the cove watersheet more conducive to small watercraft. In addition, this structure is also a 700-foot long public pier for people to use as an extension of other open spaces on the site. The location is ideal – it remains largely unaffected by shadow year-round until late in the day. The shadow studies indicated that by the time shadows begin to fall on the pier, the fan edge is largely unshaded, thereby ensuring a large areas at the water’s edge are in sunlight most of the day throughout the year.

Our understanding is that the property owners would be required to construct a breakwater/wave attenuation structure as a baseline Chapter 91 requirement. The incorporation of a fully accessible public walkway over the breakwater, however, is above and beyond what would be required under Chapter 91. According to the Fan Pier EIR/DEIR, the public pier is approximately 21,000 square feet. The public pier may be used to offset shadow impacts at a ratio of 1:1.

Upper Floor "Active" Facilities of Public Accommodation. In addition to ground floor facilities of public accommodation, the proposed Fan Pier project will include approximately 80,000 square feet of "active" second floor facilities of public accommodation such as restaurants and retail shops. The project proponents may offset shadow impacts on a 0.25:1 basis with upper floor space that is dedicated to "active" facilities of public accommodation.

Qualitative Offsets. Based on the information that we have regarding the proposed program for the project, the above public benefits will be sufficient to offset approximately 126,000 square feet of net new shadow. Based on the net new shadow of the MHP build scenario, there will be approximately 127,745 square feet of net new shadow that will remain to be offset (this figure will vary depending on the actual project build-out). Any remaining net new shadow must be offset with qualitative offsets, such as providing a water transportation subsidy or service, or other additional public water-related benefits above and beyond the Chapter 91 requirements for the site.

Water Transportation Subsidy or Service. The Fan Pier property owners may offset a portion of the remaining shadow impact with a water transportation subsidy, or provision of a particular water transportation service, such as the Cultural Loop, or regular service to the Boston Harbor Islands. Such subsidy or service must be in excess of what otherwise might be required under Chapter 91. In no event however, may a water transportation subsidy or service be used to offset more than 50% of the site's net new shadow.

Public Water-Related Facilities. Public water-related facilities that are in excess of the level of water-related benefits that is required under Chapter 91 are also eligible to be counted as offsets.

Conclusion. The program of offsets developed for the Fan Pier are designed specifically to offset the additional shadow impacts generated by the substitute heights. We use offset provisions to bring people alternatives--alternatives that extend the appeal of the waterfront through the winter, alternatives that provide shade on hot summer days, and alternatives that provide open space out over the water. The standard for height substitutions requires that alternative height limits and other requirements ensure that, in general, buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith. As demonstrated above, the substitute heights, together with the massing criteria, urban design guidelines and offsetting measures developed for Fan Pier, meet this standard.

10.4 PIER 4: SUBSTITUTIONS AND OFFSETS

Substitutions: Water-Dependent Use Zone, Height

Pier 4, shown in Figure 10-2, is the narrowest of the Inner Harbor piers, measuring approximately 174 feet across at its narrowest point and forming the eastern boundary of Fan Pier Cove. The total site area, including the parcel south of old Northern Avenue is approximately 236,440 square feet of land area. Current uses include Anthony's Pier 4 restaurant and surface parking. The City's goal for Pier 4 is to support a mix similar to Fan Pier of open space, public uses, retail, hotel, office and residential uses in order to continue this new neighborhood across the entire Inner Harbor Subdistrict. Although Pier 4 is very different from Fan Pier, the two are intimately connected. A set of substitutions similar to that which is set forth for Fan Pier is envisioned for Pier 4: new height zones and reconfiguration of the water-dependent use zone.

10.4.1 Pier 4 Substitution: Water-Dependent Use Zone – 310 CMR 9.51(3)(c)

Pier 4 is another site that can benefit from reconfiguration of its water-dependent use zone. Reconfiguration will allow a significant concentration of open space along the wharf end, with smaller setbacks along the sides of the wharf. This type of flexibility allows us to create a variety of open spaces, and to create open space areas where they will be most effective.

Pier 4 Water-Dependent Use Zone Substitution. Pier 4's water-dependent use zone under the Waterways Regulations is 100 feet along the end of the wharf, and approximately 26 feet along the sides of the wharf, for a total setback area of approximately 61,697 square feet. The water-dependent use zone calculated under the Waterways Regulations is shown in Figure 10-2. The reconfigured zone, shown in Figure 10-3, establishes a water-dependent use zone of 200 feet from the seaward edge of the wharf, to 18-30 feet on the sides of the wharf, for a total setback area of 61,697 square feet. The setback area under the substitute configuration is the same as the setback area under the Waterways Regulations.

To provide an opportunity to create a unique Harborwalk experience at the Pier 4 site, property owners will have the option to elect to incorporate Harborwalk on the Commonwealth Pier side into an arched arcade, creating a covered Harborwalk for this portion of the South Boston Waterfront. In accordance with the City's Harborwalk standards, all portions of the Harborwalk, including those incorporated into an arcade, must be open to the public 24 hours a day. Above the arcade, which must be at least 15 feet high, property owners may incorporate other elements of their development program.

Pier 4 Water-Dependent Use Zone Substitution Analysis. The Waterways Regulations permit a municipal harbor plan to specify alternative setback distances and other requirements which ensure that new buildings for nonwater-dependent use are not

constructed immediately adjacent to a project shoreline, in order that sufficient space along the water's edge will be devoted exclusively to water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(c). As demonstrated below, the substitute configuration of the Pier 4's water-dependent use zone, meets this standard.

New uses planned for the Fan Pier Cove include water transit facilities, public piers, small boat rentals and public landings. The Fan Pier edge of Pier 4 is appropriate for small-scale marina uses and in particular for public transient dockage for short stays of a few hours, a day or a week, as well as for the dockage of educational vessels and temporary floating barges for public events. The basin between Pier 4 and Commonwealth Pier currently includes the Spirit of Boston and a water transit terminal, both of which are located adjacent to Commonwealth Pier. The City's Water Transportation Plan envisions an expansion of this terminal along Northern Avenue, which eventually could include the construction of a finger pier perpendicular to Northern Avenue to accommodate additional water transit and excursion vessels. Because this basin features deep water access, the Pier 4 edge should be reserved for vessels that require this resource, such as historic or educational vessels, or small cruise ships. The Municipal Harbor Plan configuration is superior to the Chapter 91 configuration in the manner and the extent to which it devotes sufficient space along the water's edge for the water-dependent activities that are appropriate for the site, including expanded opportunities for public waterfront access.

Fan Pier Cove Edge. On the Fan Pier edge, the depth of the water-dependent use zone under the substitute configuration is four feet greater than under the Chapter 91 configuration. A 30-foot setback at this location is more than sufficient to accommodate the small-scale marina uses and dockage for educational vessels and floating barges for public events and public access envisioned for the site.

Seaward Edge of Pier 4. Although the substitute configuration of the water-dependent use zone on Pier 4 can accommodate planned water-dependent uses at the site as well as the Chapter 91 configuration, the substitute configuration creates the opportunity to provide a significant open space on the site. By requiring a setback of at least 200 feet from the end of Pier 4, we increase public access opportunities to the site by providing an open space almost one acre in size, twice as large as that created under the Waterways Regulations and the same size as the usable space at Post Office Square Park. Similar to Long Wharf park in the Downtown, Pier 4 is surrounded by water on three sides, creating a unique public open space along the South Boston Waterfront for sitting, relaxing, fishing and more passive forms of recreation. A larger open space at this location also will help to create a greater draw from the adjacent ICA site and from public uses on the ground floors of adjacent structures.

At approximately one acre in size, Pier 4 park is a little larger than half the size of Fan Pier park, adding a new and complementary element to the inventory of public open spaces new development will make available along the South Boston Waterfront. A one-acre park at the end of Pier 4 will be an appropriate size to host smaller events, such as concerts and

movie screenings, and for smaller festivals and fairs. The public open space areas designed and developed in connection with new development at Fan Pier and Pier 4 will add several new spaces, each of different scale and character, to the City's existing network of open spaces, both expanding the network and the variety of experiences the network will provide.

Commonwealth Pier Edge. Commonwealth Pier is identified in the Water Transportation Plan as an appropriate location for an expanded marine terminal. It is anticipated that the terminal would use both sides of Commonwealth Pier and accommodate a full range of linked services, including, Inner Harbor shuttle, seasonal excursion, water taxi and Cultural Loop, charter and eventually commuter service. By locating the ferry terminals along Northern Avenue, as well as the inboard end of Commonwealth Pier, they combine better visual exposure and access for pedestrians. The eastern edge of Pier 4 is an appropriate location for a variety of vessels that require deep water access, such as historic or educational vessels, or small cruise ships. Each of these uses can be accommodated with either substitute configuration of Harborwalk at this location.

Providing the option to incorporate a portion of the Harborwalk in a covered arcade creates the opportunity to develop a unique Harborwalk experience. Neither substitute configuration nor the option for an interior Harborwalk will interfere with water-dependent uses planned for the site or public access to the waterfront area. In fact, public waterfront access will be enhanced by the open space at the end of the wharf and the variety that the arcade will bring to the Inner Harbor waterfront.

Offsets for Impacts of Pier 4 Water-Dependent Use Zone Substitution. At Pier 4, as with Fan Pier, it is appropriate to offset negative impacts of the substitute water-dependent use zone with an in-kind quantitative offset of the same numerical requirement on the same site. In keeping with this principle, each decrease in the depth of the setback on Pier 4 property created by the reconfiguration is offset by a corresponding increase elsewhere on the site, thereby maintaining the same overall setback area. As demonstrated above, the substitute water-dependent use zone ensures that "new buildings for nonwater-dependent use are not constructed immediately adjacent to a project shoreline, in order that sufficient space along the water's edge will be devoted exclusively to water-dependent activity and public access associated therewith, as appropriate for the harbor in question." 310 CMR 9.51(3)(c). Moreover, also as demonstrated above, the reconfigured water-dependent use zone devotes a sufficient and appropriate amount of space along the water's edge to accommodate the water-dependent uses planned for the site with comparable or greater effectiveness than the Chapter 91 configuration, thereby meeting the regulatory standard of approval for this substitute provision.

10.4.2 Pier 4 Substitution: Building Height – 310 CMR 9.51(3)(e)

Redevelopment of Pier 4, like the adjacent Fan Pier, will be expected to provide open space and public uses, view corridors, pedestrian access, support for water-dependent uses, high quality design and small blocks. In order to create an active, mid-scale new

neighborhood, a similar level of density is desired for Pier 4. In order to achieve a floor area ratio in the range of 5.0 to 5.5, and accommodate the City's goals for public, pedestrian-scaled spaces and density, heights higher than permitted under Chapter 91 are required. The Chapter 91 heights for Pier 4, shown in Figure 10-2, range from 55 feet to approximately 120 feet. We have developed a new series of heights for Pier 4 which, together with the general criteria defined in Section 10.2.2, will ensure that new buildings will remain relatively modest in size, as appropriate for this portion Boston Harbor.

Pier 4 Height Substitution. The substitute building heights are illustrated in Figure 10-3. From the seaward edge, after a 200-foot no-build zone, the first height zone is 100 feet high. This height zone is 430 feet long in order to encourage the building of a wharf-like structure at this location. The height zones then step back to 200 feet, then 250 feet closest to old Northern Avenue.

Pier 4 Height Substitution Analysis. We have again used representative Chapter 91 and MHP build-outs, shown in Figures 8-4 and 8-5, to test the massing, wind and shadow impacts of the MHP build-out against the Chapter 91 build-out. Consistent with the methodology used in the analysis of Fan Pier, the Pier 4 Chapter 91 build-out complies with the height, open space, setback and use requirements of the Waterways Regulations but does not take into account the principles of the Public Realm Plan or the general requirements developed in this Municipal Harbor Plan. The Municipal Harbor Plan build-out is based upon the principles of the Public Realm Plan and incorporates the provisions developed in this Municipal Harbor Plan to implement the Public Realm Plan.

Massing Analysis. We intended to achieve a comparable level of density with redevelopment of Pier 4 as with the Fan Pier parcels. As we studied possible build-outs under Chapter 91, it quickly became clear that the level of density achievable under Chapter 91 would not be in keeping with our plans for an active, urban waterfront neighborhood. The Chapter 91 build-out achieves a build-out of approximately 670,000 square feet of mixed-use development space, which translates to a floor area ratio of approximately 3.1. A floor area ratio in the range of 5.0 to 5.5 would achieve approximately 1.2 million square feet of mixed-use development space. Three dimensional studies of the two build-outs are shown in figures 8-6 and 8-8.

The urban design scheme that results from the Chapter 91 is essentially, a wharf structure ranging in height from 55 feet to 120 feet. There are many precedents in and around Boston Harbor for the wharf building form. Indeed, the 100-foot height zone in the substitute height provisions anticipates that a structure emulating the historic wharf buildings will be built at the seaward edge of the parcel behind an expanded water-dependent use zone. A single wharf structure stretching the length of the wharf, or a series of low-rise buildings, however, will not provide an appropriate level of density for the site.

The Municipal Harbor Plan heights will permit an appropriate level of density for the site. The general requirements developed for Inner Harbor height substitutions will ensure that buildings remain relatively condensed in footprint. For example, for the two back building

parcels, by requiring a street wall of 75-85 feet and limiting the floorplate of tower elements to 25,000 square feet, the buildings will become taller and slimmer, creating smaller blocks and opening up view corridors. The new heights also will permit a variety of building heights and typologies, such as a wharf-like structure at the end of the site, with small towers closer to old Northern Avenue. By requiring building heights to average 150 feet, we ensure that what is developed is a mid-scale district, rather than a second Financial District with its 600-foot towers. The substitute heights will implement the Public Realm Plan, while the combination of height substitutions and the height criteria work together to ensure that new buildings for nonwater-dependent use will remain relatively modest in size, as appropriate for this area of Boston Harbor.

Wind Analysis. The standard for height substitutions requires that new buildings for nonwater-dependent use will remain relatively modest in size, in order that wind, shadow and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith, as appropriate for the harbor in question. While the substitute heights are preferable from a planning and urban design perspective, higher heights can nonetheless have significant wind and shadow impacts.

The Durgin Wind Study compared pedestrian level winds for representative Chapter 91 and MHP build-outs on the Harborwalk and in major public open space areas. The Durgin Wind Study is included in Appendix 4. The anticipated uses at each of these locations are various forms of passive recreation, including sitting, standing and walking. Both build-outs are a marked improvement over the existing, no build condition. For each of the five wind directions included in the study, eight locations (17-24) will be most directly affected by the redevelopment of Pier 4. Of these 40 coordinates studied, the MHP build-out will improve wind conditions over the Chapter 91 build condition at 2 coordinates, and will cause deterioration in wind conditions at twelve coordinates. The Durgin Wind Study indicates that the differences in pedestrian level winds between the Chapter 91 build-out and the MHP build-out are more significant on Pier 4 than on Fan Pier, as discussed below.

For northwest winds, which are predominant in spring, fall and winter months, wind conditions are primarily Category 2 (Comfortable for Short Periods of Standing or Sitting) and Category 3 (Comfortable for Walking) under the Chapter 91 and MHP build-outs. The Chapter 91 and MHP build-outs improve pedestrian level winds over the existing condition at Location 24 (eastern edge of Pier 4). At locations 19 and 20, located on the Pier 4 property at the corner of the ICA and Pier 4 properties, the MHP build-out increases pedestrian level winds from Category 2 to Category 3. At location 23, the MHP build-out increases pedestrian level winds from Category 1 to Category 2. All other locations remain the same for the Chapter 91 build and MHP build scenarios.

For southwest winds, which are predominant in the summer months, wind conditions are primarily Category 1 (Comfortable for Long Periods of Standing or Sitting) and Category 2 under the Chapter 91 and MHP build-outs. The Chapter 91 and MHP build-outs improve pedestrian level winds over the existing condition at five locations. At location 24, the MHP build-out improves wind conditions from Category 2 under the Chapter 91 build-out

to Category 1. At location 20, the midpoint location on the western edge of Pier 4, the wind conditions deteriorate from Category 2 under the Chapter 91 build to Category 3 under the MHP build condition. All other locations remain the same for the Chapter 91 build and MHP build scenarios.

Easterly winds occur approximately one-third of the time, primarily just before a storm, or in the summer as a light breeze. Northeast winds, which are primarily storm winds, are the most common of the easterly winds. Pedestrian level winds along Pier 4 are primarily Category 4 (Uncomfortable for Walking) for northeast winds. These winds occur primarily during a storm when people generally expect windy conditions. At location 17 on Fan Pier Cove near the ICA site, the MHP build-out improves conditions over the Chapter 91 build-out from Category 4 to Category 3. At location 19, the Chapter 91 build condition improves pedestrian level winds over the no build from Category 3 to Category 1, while the MHP build-out results in Category 2 pedestrian level winds. At location 20, which, on the MHP build-out is located at the corner of the seaward building, the MHP build-out wind condition is Category 4, while under the Chapter 91 build, the location is Category 1, when the location is along the side of the building, rather than at a corner.

For easterly storm winds, pedestrian level winds range from Category 1 to Category 4. The Chapter 91 and MHP build-outs improve pedestrian level winds over the existing condition at three locations. Again at location 20, the MHP build-out wind condition is Category 4, while under the Chapter 91 build, the location is Category 1. This larger difference is due to the fact that under the Chapter 91 scenario, the building at this location extends closer to the end of the pier and therefore the location of the assessment point is along the side of the building, rather than at a corner of the larger MHP setback zone. At locations 23 and 24 on the eastern edge of Pier 4, the Chapter 91 build results in Category 3 conditions, while under the MHP build-out, pedestrian level wind conditions deteriorate to Category 4. All other locations remain the same for the Chapter 91 build and MHP build scenarios.

For southeasterly winds, pedestrian level wind conditions are primarily Category 1 or Category 2. The Chapter 91 and MHP build-outs improve pedestrian level winds over the existing condition at three locations. At location 20, the MHP build wind condition is Category 2, while the Chapter 91 build condition is Category 1. At location 23, the MHP build wind condition is Category 3, while the Chapter 91 build condition is Category 2. At location 24, the MHP build wind condition is Category 2, while the Chapter 91 build condition is Category 1. All other locations remain the same for the Chapter 91 build and MHP build scenarios.

In summary, the MHP build scenario causes an improvement of pedestrian level winds over the Chapter 91 build scenario at two coordinates and causes a deterioration of pedestrian level wind conditions at twelve coordinates. The majority of the occasions when the MHP build conditions create a deterioration of the pedestrian level wind environment are increases from Category 2 to 3 (NW/19, NW/20 SW/20 and SE/23) or increase from Category 1 to 2 (NW/23, NE/19, SE/20 and SE/23). In none of these cases

do the increases render the area unsuitable for the planned public uses of the Harborwalk and open space areas of sitting, standing and walking. More significant, but within the range of what is acceptable, are those coordinates where the MHP build-out is predicted to create a Category 4 pedestrian wind condition. At location 20, for both northeast and easterly winds, the MHP build condition increases a Category 1 condition under the Chapter 91 build to a Category 4 condition. Under the MHP build-out this location is a building corner, while under the Chapter 91 condition this location is along the side of a building. Also, northeast and east winds are storm winds, when people generally expect windy conditions in our area. For east winds, at locations 23 and 24 along the eastern edge of Pier 4, the MHP build-out is predicted to increase the Chapter 91 wind condition from Category 3 to Category 4. Wind conditions at these 3 locations (20, 23 and 24) would need to be mitigated if an actual build design resulted in adverse impacts.

Shadow Analysis. The MHP build scenario indicates that a project taking advantage of the substitute height provisions will generate greater shadow impacts than the Chapter 91 build-out. The shadow impacts of the MHP build-out on October 23, shown in Figure 8-10, are summarized below.

At 9:00 a.m., shadows from the proposed wharf structure extend into the Fan Pier Cove area, while shadows from the towers extend to interior open spaces, such as the proposed public green and the extension of the that open space on the McCourt/Broderick property. At 10:00 a.m., shadows from the wharf structure continue to fall on the Cove, while shadows from the tower elements now fall only on what are anticipated to be buildings on the Fan Pier and McCourt/Broderick properties. The interior public spaces will remain free from shadow impacts of Pier 4 buildings for the remainder of the day. At 11:00 a.m. and noon, shadows falling on the Cove from the wharf structure lessen, while shadows are beginning to fall on the park at the end of Pier 4. At 1:00 and 2:00 p.m., there is little to no shadow cast on the Cove, although shadow now covers approximately one-half of the park at the end of Pier 4. The tower located on Northern Avenue is beginning to cast shadow on the watersheet between Pier 4 and Commonwealth Pier. From 3:00 p.m. to 5:00 p.m., the shadow on the park at the end of Pier 4 grows smaller, while the shadow cast on the watersheet between Pier 4 and Commonwealth Pier continues to grow. The watersheet is completely in shadow after 4:00 p.m.

During the morning and early afternoon hours, the eastern edge of Pier 4 and Pier 4 Park are free from major shadow impact. As the sun sets to the west, the western edge of Pier 4 is in sunlight, while shadows begin to fall on Pier 4 Park, the eastern edge and the watersheet adjacent to Commonwealth Pier.

A comparative analysis of the shadow impacts of the Chapter 91 build and MHP build conditions, shown in Figure 8-12, indicates that the MHP build condition generates approximately 34,639 square feet of net new shadow on the focus date of October 23. Throughout the morning hours and into the early afternoon, net new shadow falls primarily in Fan Pier Cove. From 3:00 p.m. on, net new shadow falls onto the watersheet between Pier 4 and Commonwealth Pier. Pier 4 Park remains free from net new shadow impacts.

Each square foot of net new shadow must be offset in accordance with the principles and parameters established in Section 10.2.3.

Offsets for Impacts of Pier 4 Height Substitution. Height substitutions are permitted in a Municipal Harbor Plan provided the plan specifies “alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith.” 310 CMR 9.51(3)(e). As discussed in greater detail above, this plan’s massing criteria ensure that buildings for nonwater-dependent use will be relatively modest in size, and minimize wind and shadow impacts. The wind analysis identified minor wind impacts that can be addressed through standard mitigation measures. The shadow analysis identified shadow impacts caused by the height substitutions that are in excess of the shadow impacts of the Chapter 91 build-out. The program of offsets developed for Pier 4 is designed specifically to offset these additional shadow impacts.

The Pier 4 offsets are a combination of measures that we believe will be effective at counteracting negative impacts to the pedestrian-level environment caused by the substitute height provision for the site. Like Fan Pier, an in-kind numerical offset for the Pier 4 height substitution would undercut the rationale for the substitution, but other types of numerical offsets are appropriate. Also, qualitative offsets designed to activate the land and watersheet year-round are particularly well-suited to counteracting the negative impacts of the height substitution.

Certain of the offsets are designated as required offsets. Although we do not know the exact amount of net new shadow that will be cast by an actual project on Pier 4, we can use the MHP build scenario to estimate the amount of net new shadow that will be generated by an actual project in order to understand the approximate level of offset that will be required. To the extent that offsets from the list below are insufficient to offset the full amount of net new shadow, additional qualitative offsets will be required to make up the balance.

Additional Open Space. In accordance with Sections 8.9 and 10.2.3, additional open space that meets the criteria of Section 8.9 can offset shadow impacts on a 2:1 basis.

Civic, Cultural and Educational Facilities (Required Offset). The Pier 4 developers must include a major civic, educational or cultural facility on the ground floor of the wharf structure. Possible uses are a new maritime center, a public library or some type of performing arts and/or visual arts center. The mission of the new facility should be incorporated into the site’s open space and watersheet areas. For example, a maritime center could include an educational program on ship-building and repair or interpret Boston’s rich maritime history, and incorporate an historic or educational vessel into its programming. The property owners may offset shadow impacts with the amount of floor space devoted to this use on a 1:1 basis.

Four-Season Room (Required Offset). To complement open space and water-related facilities on the Fan Pier, the property owners will create a four-season room. The four-season room and exterior viewing area should be designed to be complementary and to provide people with different options, depending upon the weather. As with Fan Pier's Harbor Hall, the interior space should include glass walls that can be opened onto the exterior space in the good weather and closed to provide a protected viewing and sitting area in the colder months. In the case of Pier 4, an upper-level viewing area and four-season room located on the roof of the building that is closest to the Harbor end of the wharf that provides both interior and exterior space, is preferred. The property owners may offset shadow impacts with the amount of floor space devoted to these uses on a 1:1 basis.

Additional Open Space. In accordance with Sections 8.9 and 10.2.3, additional open space that meets the criteria of Section 8.9 can offset shadow impacts on a 2:1 basis.

Upper Floor "Active" Facilities of Public Accommodation. To the extent that any development project on Pier 4 includes "active" facilities of public accommodation on upper floors, the owners may offset shadow impacts with the amount of floor space devoted to these uses at a ratio of 0.25:1.

Qualitative Offsets. To the extent that the amount of the above public benefits is insufficient to offset the full level of net new shadow generated by an actual project, the remaining level of net new shadow must be offset with additional qualitative offsets, such as providing a water transportation subsidy or service, or additional public water-related benefits above and beyond the Chapter 91 requirement for the site.

Water Transit Subsidy or Service. Pier 4 is the smallest of the large development parcels located in the Inner Harbor. Because there are fewer opportunities to provide offsets on-site, a water transit subsidy is an appropriate offset. A water transit subsidy or service may not be used to offset more than 50% of the site's net new shadow.

Public Water-Related Facilities. The watersheet between Pier 4 and Commonwealth Pier boasts deep-water access that can accommodate an historic or educational vessel. This type of watersheet use which would provide a unique public benefit in the Inner Harbor area and would give people another reason to come to the waterfront, would be an appropriate offset of shadow impacts for development at Pier 4.

Conclusion. The program of offsets developed for the Pier 4 is designed specifically to offset these additional shadow impacts. The standard for height substitutions requires that alternative height limits and other requirements ensure that, in general, buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith. As demonstrated above, the substitute heights, together with the massing criteria, urban design guidelines and offsetting measures developed for Pier 4, meet this standard.

10.5 THE RESTAURANT PARCELS

(No Substitutions)

At the base of Pier 4 are two small parcels, shown in Figure 10-3, containing two restaurants: The Seaport Bar & Grill and Eastern Pier II. The existing structures are 1- 2 stories high and cover 80-90% of their lot area.

Our primary goal at this location is to complete a Harborwalk connection from Pier 4 along the seaward edge of the Restaurant Parcels and connecting to new Northern Avenue. The Eastern Pier II already incorporates a public walkway at the seaward edge of the site. It will be important for this Harborwalk to connect at grade to Pier 4 and The Seaport Bar and Grill, and for the Seaport Bar & Grill Harborwalk to connect at new Northern Avenue.

Incorporating Harborwalk into each of these sites will add to the variety of pedestrian experiences along the South Boston Waterfront. The existing restaurants have, in one incarnation or another, been a part of the South Boston Waterfront landscape for many years and are favorites with residents and visitors alike. The existing uses bring an added dimension to the area and will support public uses on adjacent parcels and watersheet. This Municipal Harbor Plan supports the existing uses and structures. We would like to see this Harborwalk connection completed. No substitutions, however, are proposed for these parcels.

10.6 THE MCCOURT/BRODERICK PARCELS

Following the completion of pending land transfers, the parcels shown on Figure 10-5, comprising approximately 19.3 acres, will be owned by the same or a related entity. For ease of reference, these parcels have been designated the McCourt/Broderick Parcels. The parcels are located primarily along old Northern Avenue and new Northern Avenue. Only 84,800 square feet (less than 2 acres) of the McCourt/Broderick Parcels are within Chapter 91 jurisdiction, and only one of the parcels is located directly on the waterfront. This section will include a discussion of both the jurisdictional parcels and nonjurisdictional parcels that are located in the South Boston Waterfront. The discussion first will focus on all of the McCourt/Broderick Parcels and how the principles of the Public Realm Plan and this Municipal Harbor Plan will be applied to development of these parcels. Then, this section will address specific substitutions and offsets for those parcels located within jurisdiction.

On May 15, 2000, The McCourt Company filed an Environmental Notification Form/Project Notification Form with EOE and the BRA for the portion of the McCourt holdings bounded by Old and new Northern Avenues, New Sleeper Street and East Service Road. Parcels A and B, shown in Figure 10-5, are included in the ENF/PNF project site.

10.6.1 Consistency with the Public Realm Plan

The Public Realm Plan is the City's vision for the build-out of the entire South Boston Waterfront. Any future development of the McCourt/Broderick Parcels will be reviewed in terms of its consistency with the principles and concept features of the Public Realm Plan.

Street and Block Plan. The Public Realm Plan establishes a street and block plan that focuses on creating smaller, pedestrian-oriented blocks and maintaining and promoting the physical, visual and functional connections between the waterfront and area neighborhoods. The roadway network is organized around major streets, each with its own function and character. New Northern Avenue, the northernmost east-west connector, will serve as the district's major waterfront boulevard – the signature street for both pedestrians and vehicles. It threads together a number of important neighborhoods and places along nearly the entire Boston waterfront and provides direct connections with Interstate 93 ramps.

Land Use. A primary goal of the Public Realm Plan is for the Inner Harbor Subdistrict to emerge as a lively, mixed-use neighborhood with open space and public uses; institutional and residential uses; visitor accommodations; retail, food, entertainment, leisure uses and activities at both street and second levels; and maximum retail frontage along old Northern Avenue. An important component of any new development will be a critical mass of residential uses, which are absolutely essential to the creation of a true neighborhood. While the Public Realm Plan required new development to include 25% residential uses, the BRA recently increased this requirement to one-third and limited the amount of office uses to one-third. In addition, cultural, civic and other public uses should be woven into the new development to help to establish the area as a new destination for residents and visitors.

Density and Scale. The height limits identified in the Public Realm Plan for most of the McCourt/Broderick Parcels is 150 feet, with the possibility of heights up to 250 and 300 feet with a Planned Development Area designation. The Public Realm Plan establishes lower heights for certain of the parcels located within Chapter 91 jurisdiction, and this Municipal Harbor Plan is consistent with the Public Realm Plan in this regard. These sites are discussed in greater detail in Sections 10.6.4 and 11.3.2. Buildings should be a variety of different heights, include street walls, preserve existing view corridors, create new corridors and respect the other urban design guidelines developed in the Public Realm Plan.

Open Space. The BRA has outlined an open space network that will have the same relationship to the district that the Boston Common and Commonwealth Avenue Mall have to the Back Bay. The open space network is shown in Figure 8.2. Open spaces on the McCourt/Broderick Parcels must complement open spaces on adjacent properties in order to create a well-designed network of open spaces throughout the Inner Harbor. It will be

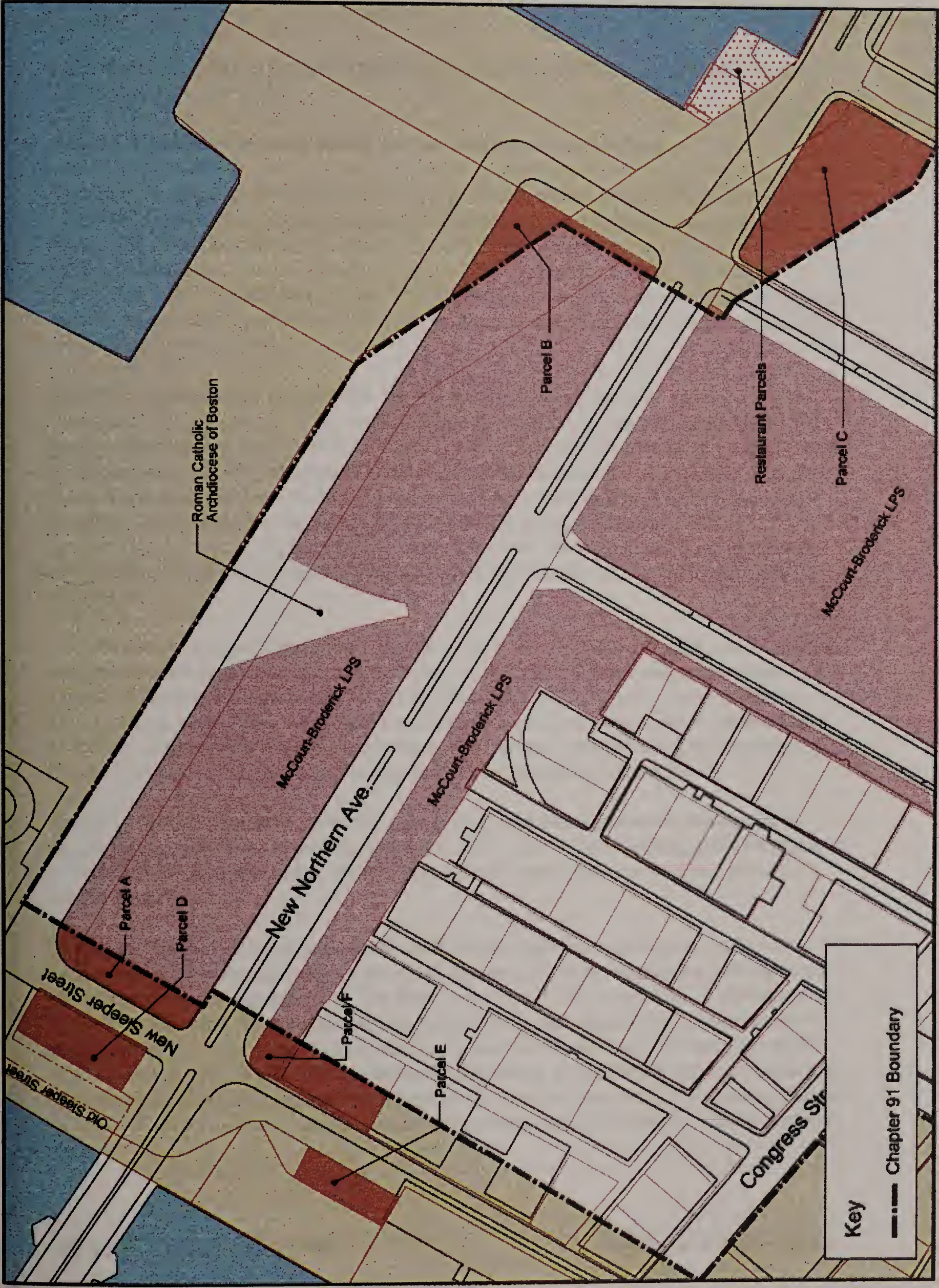


Figure 10-5 The McCourt / Broderick Parcels and Restaurant Parcels

particularly important to create a strong connection between Courthouse public transit station and the water's edge.

10.6.2 Consistency with the South Boston Municipal Harbor Plan

Although the majority of the McCourt holdings are not within Chapter 91 jurisdiction, this Municipal Harbor Plan establishes baseline requirements and guidelines that, through zoning and the Article 80 review process, also will guide development on the McCourt/Broderick Parcels and other nonjurisdictional parcels in the South Boston Waterfront. These guidelines are based on the Public Realm Plan which considers the area on both the north and south sides of Northern Avenue as a whole from the planning and urban design perspectives.

Open Space and Lot Coverage. The Waterways Regulations limit lot coverage to 50%. Because of the importance of open space along the waterfront, this Municipal Harbor Plan permits substitutions in the amount of open space only in very limited circumstances. Lot coverage ratios of 50% are unusual in other City neighborhoods. For example, Back Bay, Beacon Hill and the North End neighborhoods all have lot coverage ratios ranging from 64-66%. We believe that lot coverage ratios more in keeping with other City neighborhoods is more appropriate for areas not located directly on the water. Through new zoning, the nonjurisdictional McCourt/Broderick Parcels will be limited to 65% lot coverage.

This Municipal Harbor Plan also establishes a set of lot coverage and open space standards applicable to all property owners in the MHP Area which the BRA will apply in their review of development proposals for the McCourt/Broderick Parcels. These standards cover, among other things, open space and lot coverage calculations, public streets and sidewalks, public space amenities, maintenance standards, programming and signage. A detailed discussion of these baseline standards is contained in Section 7.4.

Building Height. The McCourt/Broderick Parcels will be subject to the same general height restrictions as the large holdings in the MHP Area. Thus, buildings will be required to include a 75-foot street wall, and the floorplate of tower elements will be limited to 25,000 square feet.

In order to ensure that the ground-level environment remains pedestrian-friendly, this Municipal Harbor Plan establishes wind and shadow standards for projects seeking to take advantage of height substitutions. See Section 8.7.3, 8.9, 10.2.2 and 10.2.3. Buildings not located on the water can also have a negative impact on the ground level environment of the waterfront area, particularly with respect to shadow. In addition, we must be careful with respect to wind levels throughout the South Boston Waterfront in order to ensure that the ground level environment remains conducive to pedestrian activity. Build-out of some of the McCourt/Broderick Parcels may create wind and shadow impacts on the waterfront area.

In the Article 80 process, development proposals for the McCourt/Broderick Parcels will be required to undergo the wind and shadow analyses detailed in Section 8.7.3. Because none of the parcels is located directly on the water, it will be more difficult to determine what, if any, wind impacts new structures will have on the waterfront area. Shadow impacts on the shadow protection zone, however, are more easily isolated. With the exception of Parcels D, E and F that are more properly viewed as infill parcels and will be treated as such, new development on the McCourt/Broderick Parcels will be required to offset net new shadow cast on the shadow protection zone in the manner described in Section 10.2.3.

Facilities of Public Accommodation. The Waterways Regulations require 100% of the ground floor of buildings containing nonwater-dependent uses to be devoted to facilities of public accommodation. Requiring ground floor facilities of public accommodation is an important component of the City's strategy to activate the South Boston Waterfront. The owners of large property holdings in the area are, therefore, required to maintain this percentage. Through zoning requirements including Planned Development Area provisions, the McCourt parcels also will be required to devote 100% of the ground floor of structures to facilities of public accommodation.

In addition to including restaurants, retail shops and public lobby areas on the ground floors of new structures, with respect to structures located at or near the waterfront, the McCourt parcels should include four-season rooms that are open to the public. These four-season rooms will extend the appeal of the waterfront area throughout the year and support other public attractions located nearby. Additional guidance on these types of interior public spaces, including upper floor viewing areas, can be found in Section 8.9.

In order to accommodate the needs of new residential uses, a portion of the ground floor may be required for residential lobby space and other upper floor accessory uses. To ensure that ground floor space that is required for upper floor accessory uses has the least possible negative impact on public water-related interests, property owners are required to limit residential lobby and accessory uses to 20% of the building footprint. Through zoning, the McCourt/Broderick Parcels will be required to meet this standard.

To ensure that the South Boston Waterfront becomes a true neighborhood, cultural, civic and educational uses should be incorporated throughout the District. As with large property holdings in the MHP Area, the McCourt/Broderick Parcels will be expected to include these types of uses when they are developed.

10.6.3 Parcels A and B: Substitutions and Offsets **(Substitutions: Lot Coverage, Open Space, Height)**

Parcels A and B, shown in Figure 10-5 are two building parcels located at either end of the ENF/PNF project site. The BRA's representative build-out for the Inner Harbor Subdistrict (see Figure 8-5) incorporates a street and block plan for the area as well. From the street and block plan we have extrapolated likely building parcels for large unbuilt

tracts of land, such as the McCourt/Broderick parcels. Parcel A, located at the corner of New Sleeper Street and old Northern Avenue, is approximately 48,300 square feet, approximately 10,200 square feet of which is located in Chapter 91 jurisdiction. Parcel B, located at the corner of old Northern Avenue and East Service Road is approximately 38,850 square feet, approximately 11,793 square feet of which is located in Chapter 91 jurisdiction. See Figure 10-5. No portion of these parcels fronts directly onto the water. Both of these parcels are included in the ENF/PNF project site. We have addressed the issue of substitutions for these parcels accordingly.

Parcels A and B Lot Coverage Substitution, Analysis and Offset. The Waterways Regulations require that, with respect to private as well as Commonwealth tidelands, structures for nonwater-dependent uses not exceed a 50% lot coverage ratio. Lot area used for water-dependent purposes is not subject to the 50% limitation. The DEP shall waive this numerical standard if the project conforms to an approved Municipal Harbor Plan which specifies alternative site coverage ratios and other requirements which ensure that, in general, buildings for nonwater-dependent purposes will be relatively condensed in footprint, in order that an amount of open space commensurate with that occupied by such buildings will be available to accommodate water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(d).

Application of the lot coverage ratio of the Waterways Regulations to Parcels A and B would result in approximately 5,360 square feet of open space on Parcel A and approximately 5,867 square feet of open space on Parcel B. The lot coverage substitution for these parcels is to increase the lot coverage ratio to permit higher lot coverage ratios on these parcels. No specific lot coverage ratio substitution is developed. To the extent that the eventual build-out on Parcels A and B result in lot coverage ratios in excess of 50% on the portions of the parcels that are located in jurisdiction, that same amount of open space must be provided elsewhere in the ENF/PNF project site. This substitution may result in more open space located outside the MHP Area, but it also will provide us the necessary flexibility to locate open spaces where they can contribute to and maximize those spaces that are located directly on the water. It is important to note that the 11,227 square feet of open space from Parcels A and B is will be provided in addition to the 35% will be required throughout the portion of the PNF/ENF project site that is not within Chapter 91 jurisdiction.

Because neither Parcel A nor Parcel B is located on the waterfront, the most effective use of this approximately 11,227 square feet of open space for water-dependent purposes is to provide better public access to the Inner Harbor. It is important that open spaces in the ENF/PNF project site be coordinated with other open spaces and with public uses located throughout the Inner Harbor to create the places and connections that will bring people to and through the area. The critical locations for open space in the ENF/PNF project site are across from the federal courthouse and in creating a connection between the MBTA station and Fan Pier Cove.

This substitute provision is unlikely to have any impact on the building footprints of the buildings constructed on Parcels A and B in light of the fact that the entire ENF/PNF project site is now, or soon will be, under the same ownership, and that but a small fraction of Parcels A and B are in jurisdiction. Without this substitution, building mass could be shifted in such a manner that the bulk of the building could be located outside of jurisdiction and the requisite amount of open space could be located within jurisdiction. We believe strongly that using this open space to enhance Courthouse Square and the connection between the MBTA station and Fan Pier Cove allows us to leverage the impact of this small amount of open space well beyond what is possible were it to remain in jurisdiction.

As discussed above, this substitution complies with the regulatory standard for lot coverage ratio substitutions. Together, the new lot coverage ratio and other requirements ensure that buildings for nonwater-dependent purposes will be relatively condensed in footprint. There is no net loss of open space in the ENF/PNF project site, and any negative impact associated with the loss of 11,227 square feet of open space in jurisdiction is offset by the greater impact this small amount of open space will have if used to enhance connections to the federal courthouse and the water. Because there is no net loss of open space in the ENF/PNF project site, an amount of open space commensurate with that occupied by buildings for nonwater use remains available to accommodate water-dependent activity and public access associated therewith, with comparable or greater effectiveness than the provisions of the Waterways Regulations.

Parcels A and B Open Space Substitution, Analysis and Offset. For nonwater-dependent use projects located on Commonwealth tidelands, that portion of the site not located in the building footprint must include exterior open spaces for active or passive public recreation, such as parks, plazas and observation areas. The amount of such space shall be at least equal to the square footage of all Commonwealth tidelands on the project site landward of the project shoreline and not within the footprint of any buildings, less any space deemed necessary by the DEP to accommodate other water-dependent uses. The DEP shall waive this requirement if the project conforms to an approved Municipal Harbor Plan that specifies alternative requirements for public outdoor recreation facilities that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. 310 CMR 9.53(2)(b).

To the extent that the eventual build-out of Parcels A and B takes advantage of the lot coverage substitution, and results in less open space in the MHP Area, it will cause a proportionate reduction in exterior open spaces for active or passive recreation. The substitute provision for this requirement is to permit these two parcels to provide less space for public recreation facilities than required under the Waterways Regulations, provided that this substitute provision may be used only in connection with the lot coverage substitution. To the extent the eventual build-out of Parcels A and B results in greater than 50% lot coverage, the amount of open space lost must be incorporated elsewhere into the ENF/PNF project site, and that same amount of additional open space must be used for either active or passive public recreation, as opposed to additional roadways.

The Waterways Regulations permit us to establish alternative requirements for public outdoor recreation facilities that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. Although this substitution may result in greater amounts of open space for public recreation being located outside of Chapter 91 jurisdiction, the combination of lot coverage and open space substitutions allow us to increase open space at locations where it will be most critical to the development of the area, and will play the greatest role in increasing public access. This substitution and offset, in conjunction with the lot coverage substitution and offset, meet the regulatory standard for approval.

Parcels A and B Height Substitution and Analysis. Chapter 91 heights for Parcels A and B are shown in Figures 10-2 and 10-6, respectively. The Chapter 91 heights for Parcel A range from 105 feet to approximately 190 feet. The Chapter 91 heights for Parcel B range from approximately 120 feet to 130 feet. The height substitution for both parcels is 250 feet. See Figures 10-3 and 10-7. Height substitutions are permitted in a Municipal Harbor Plan provided the plan specifies “alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith.” 310 CMR 9.51(3)(e).

Chapter 91 does not control height on the majority of Parcels A and B. The purpose of the height substitution for Parcels A and B is to permit flexibility in the design of the buildings that will be located on Parcels A and B as well as heights that are consistent with the heights of other nearby structures. Parcel A is located adjacent to areas for which height substitutions of 250 feet are proposed. Parcel B is located across old Northern Avenue from the new federal courthouse, which is approximately 155 feet high.

Massing Analysis. Because of the requirement to construct a street wall, and the 25,000 square foot limitation that will be imposed on the floorplate of any tower elements, the heights of much of the areas in jurisdiction will be significantly lower than the Chapter 91 permitted heights. It is important that these height substitutions be viewed in the context of the general requirements for height contained in Chapter 7 and the general provisions relating to substitutions contained in Chapter 8.

Wind Analysis. Because Parcels A and B are not located directly on the waterfront, the substitute heights on Parcels A and B are not anticipated to have an impact on the pedestrian level winds for the locations studied. Under Article 80, the project proponent will be required to conduct a full wind study of all surrounding areas for all buildings in excess of 150 feet in height.

Shadow Analysis. Our representative build-out of the MHP Area did not include portions of the Inner Harbor that are not within Chapter 91 jurisdiction. Although Parcels A and B are not located directly on the waterfront, it is possible that the substitute heights on

Parcels A and B may have some impact on areas within the shadow protection zone. Likewise, depending on the build-out of the nonjurisdictional parcels of the ENF/PNF project site, buildings located on these parcels also could cast shadow on portions of the shadow protection zone. During the Article 80 and MEPA review processes, the property owners will be required to determine their net new shadow impact on the shadow protection zone for the build-out of the entire ENF/PNF project site. The actual build-out of the ENF/PNF project site will dictate the actual level of net new shadow, and likewise the appropriate level of offsets.

Offsets for Impacts of Height Substitutions on Parcels A and B. Height substitutions are permitted in a Municipal Harbor Plan provided the plan specifies “alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith.” 310 CMR 9.51(3)(e). As discussed in greater detail above, this plan’s massing criteria ensures that buildings for nonwater-dependent use will be relatively modest in size, and minimize wind and shadow impacts. The wind analysis identified no wind impacts on waterfront areas on account of the substitute heights for Parcels A and B. The shadow analysis identified shadow impacts caused by build-out on the jurisdictional parcels in the ENF/PNF project site. The program of offsets developed for the ENF/PNF project site is designed specifically to offset these additional shadow impacts, plus any shadow impact on the shadow protection zone from the nonjurisdictional parcels in the ENF/PNF project site.

The offsets are a combination of measures that we believe will be effective at counteracting negative impacts to the pedestrian-level environment caused by the substitute provisions for the site in combination with the build-out of nonjurisdictional parcels in the ENF/PNF project area. Like Fan Pier, an in-kind numerical offset for the Parcel A and B height substitution would undercut the rationale for the substitution, but other types of numerical offsets are appropriate. Also, shadow impacts will be caused by more than the jurisdictional parcels.

Certain of the offsets are designated as required offsets. Although we do not know the exact amount of net new shadow that will be cast by an actual project on the ENF/PNF project site, we can designate appropriate offsets to be used when the level of net new shadow is known.

Civic, Cultural and Educational Facilities (Required Offset). The McCourt/Broderick owners must include a major civic, educational or cultural facility in their development site. Possible uses are a museum, a public library or some type of performing arts and/or visual arts center. The mission of the new facility should be incorporated into the site’s open space areas, and in particular to enhance the public realm and ground plane along Old and new Northern Avenues. The property owners may offset shadow impacts with the amount of floor space devoted to this use on a 1:1 basis.

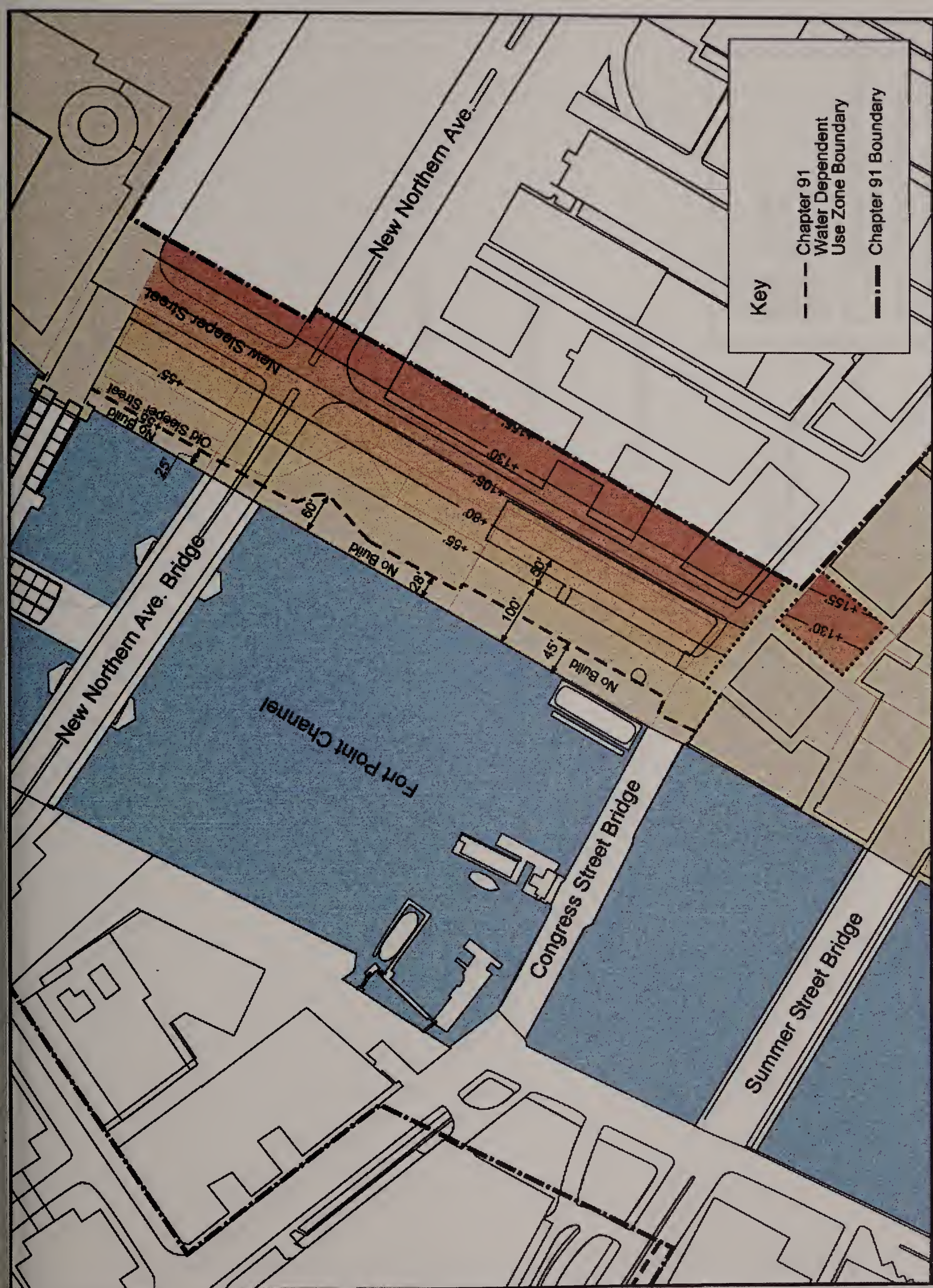


Figure 10-6 Barking Crab, Children's Wharf and McCourt/Broderick Chapter 91 Heights and Water Dependent Use Zone

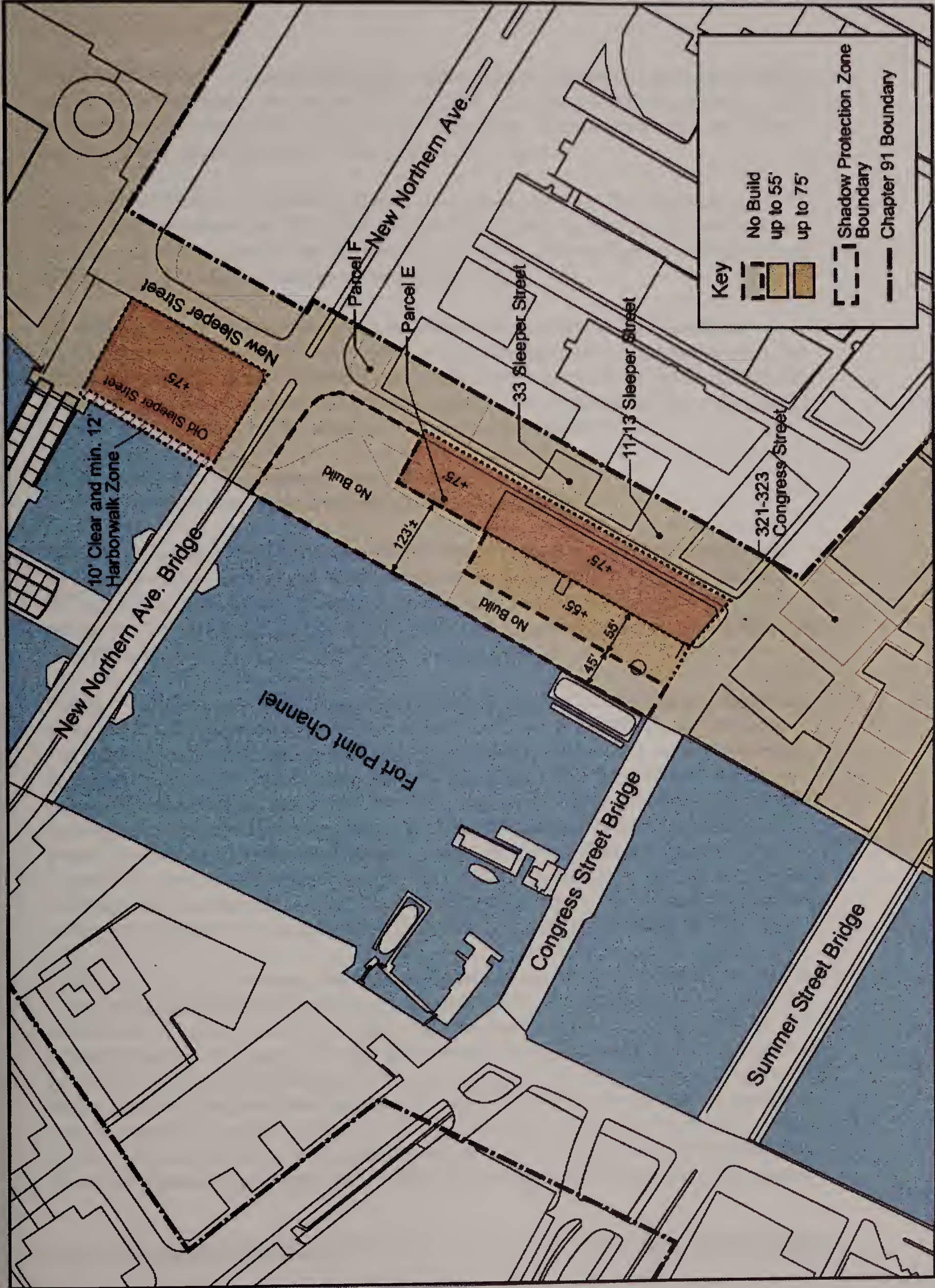


Figure 10-7 Barking Crab, Children's Wharf and McCourt/Broderick Substitution Provisions

Four-Season Room. To complement open space, cultural and civic uses on the ENF/PNF project site, the property owners should consider incorporating a four-season room and/or an upper level viewing area. The property owners may offset shadow impacts with the amount of floor space devoted to these uses on a 1:1 basis.

Upper Floor "Active" Facilities of Public Accommodation. To the extent that any development project on the ENF/PNF project site includes "active" facilities of public accommodation on upper floors, the owners may offset shadow impacts with the amount of floor space devoted to these uses at a ratio of 0.25:1.

Qualitative Offsets. To the extent that the amount of the above public benefits is insufficient to offset the full level of net new shadow generated by an actual project, the remaining level of net new shadow must be offset with additional qualitative offsets, such as providing a water transportation subsidy or service, or additional public water-related benefits above and beyond the Chapter 91 requirements for the site.

10.6.3 Parcel C: Substitutions and Offsets **(Substitutions: Lot Coverage, Open Space, Height)**

Parcel C, shown in Figure 10-5, is a 205,500 square foot parcel of land located on the corner of Northern Avenue and West Service Road, immediately adjacent to the future location of the East Office Building. Approximately 38,659 square feet of Parcel C is located in Chapter 91 jurisdiction, but no portion of the parcel is located on the waterfront. Parcel C is not included in the ENF/PNF project filing.

Parcel C Lot Coverage Substitution, Analysis and Offset. The Waterways Regulations require that, with respect to private as well as Commonwealth tidelands, structures for nonwater-dependent uses not exceed a 50% lot coverage ratio. Lot area used for water-dependent purposes is not subject to the 50% limitation. The DEP shall waive this numerical standard if the project conforms to an approved Municipal Harbor Plan which specifies alternative site coverage ratios and other requirements which ensure that, in general, buildings for nonwater-dependent purposes will be relatively condensed in footprint, in order that an amount of open space commensurate with that occupied by such buildings will be available to accommodate water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(d).

Application of the lot coverage ratio of the Waterways Regulations to the portion of Parcel C that is in jurisdiction will result in approximately 19,330 square feet of open space in jurisdiction. The lot coverage substitution for these parcels is to permit a higher lot coverage ratio on this parcel. No specific substitute lot coverage ratio is developed. To the extent that the eventual build-out on Parcel C results in lot coverage ratio in excess of 50% on the portion of the parcel that is located in jurisdiction, that same amount of open space must be provided elsewhere within the development site. This substitution may result in more open space located outside the MHP Area, but it also will provide us the necessary flexibility to locate open spaces where they can contribute to and maximize those spaces.

that are located directly on the water. It is important to note that the 19330 square feet of open space from Parcel C will be provided in addition to the 35% will be required on the portion of the development site that is not in jurisdiction.

This substitution may result in more open space located outside the MHP Area, but it also will provide the necessary flexibility to locate all or a portion of the jurisdictional open space where it is most appropriate in terms of public use and access and from an urban design perspective. Because Parcel C is not included in the ENF/PNF project area, we have no indication of the owner's plans for this site. Whatever the eventual structures and uses on this parcel, the site's open space areas must complement the open spaces on the parcels that surround and work with them to create connections to water transit, cultural, civic and educational facilities and all the public amenities envisioned throughout the Inner Harbor Subdistrict.

This substitute provision will not impact the size of the building footprint on the parcel in light of the fact that despite its size, such a small portion of Parcel C is within jurisdiction (approximately 19%), and because the configuration of the jurisdictional piece is not by itself a building parcel. Once combined with other land area to form a building parcel, building mass could be shifted in such a manner that the bulk of the building could be located outside of jurisdiction and the requisite amount of open space could be located within jurisdiction. We believe that, in view of the fact that so little is known regarding the owner's intentions for this parcel, that it is important to maintain the flexibility that this substitute provisions will provide, particularly when such flexibility will have so little impact on public water-related interests. Also, from an urban design perspective, the building will have a presence on Northern Avenue, and should continue the building line of the buildings on either side of it.

This substitution complies with the regulatory standard for lot coverage ratio substitutions. Together, the new lot coverage ratio and the requirement to include the jurisdictional open space elsewhere on development parcel ensures that buildings for nonwater-dependent purposes will be relatively condensed in footprint. Also, there is no net loss of open space on the development site. Any negative impact associated with the loss of 19,330 square feet of open space in jurisdiction is offset by the greater impact that can be achieved with this open space given the flexibility to design a site in manner that maximizes public use and activity. Because there is no net loss of open space in the development site, an amount of open space commensurate with that occupied by nonwater-dependent buildings remains available to accommodate water-dependent activity and public access associated therewith, with comparable or greater effectiveness than the provisions of the Waterways Regulations.

Parcel C Open Space Substitution, Analysis and Offset. For nonwater-dependent use projects located on Commonwealth tidelands, that portion of the site not located in the building footprint must include exterior open spaces for active or passive public recreation, such as parks, plazas and observation areas. The amount of such space shall be at least equal to the square footage of all Commonwealth tidelands on the project site landward of

the project shoreline and not within the footprint of any buildings, less any space deemed necessary by the DEP to accommodate other water-dependent uses. The DEP shall waive this requirement if the project conforms to an approved Municipal Harbor Plan that specifies alternative requirements for public outdoor recreation facilities that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. 310 CMR 9.53(2)(b).

To the extent that the eventual build-out of Parcel C takes advantage of the lot coverage substitution and results in less open space in the MHP Area, it will cause a proportionate reduction in exterior open spaces for active or passive recreation. The substitute provision for this requirement is to permit Parcel C to provide less space for public recreation facilities than required under the Waterways Regulations, provided that this substitute provision may be used only in connection with the lot coverage substitution. To the extent the eventual build-out of Parcel C results in greater than 50% lot coverage within jurisdiction, the amount of open space lost must be incorporated elsewhere in the development site, and that amount of additional open space must be used for either active or passive public recreation.

The Waterways Regulations permit us to establish alternative requirements for public outdoor recreation facilities that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. Although this substitution may result in greater amounts of open space for public recreation being located outside of Chapter 91 jurisdiction, the combination of lot coverage and open space substitutions allow us to increase open space at locations where it will be most critical to the development of the area and will play the greatest role in increasing public access. This substitution and offset, in conjunction with the lot coverage substitution and offset, meet the regulatory standard of approval.

Parcel C Height Substitution, Analysis and Offset. The Chapter 91 heights for the portion of Parcel C that is in jurisdiction is shown in Figure 10-2. The Chapter 91 heights range from 55 feet to 130 feet. The height substitution for Parcel C is 250 feet. See Figure 10-3. Height substitutions are permitted in a Municipal Harbor Plan provided the plan specifies “alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith.” 310 CMR 9.51(3)(e).

Massing Analysis. Chapter 91 does not control height on the majority of Parcel C. The purpose of the height substitution for Parcel C is to permit flexibility in the design of the building and to permit heights that are consistent with the heights of other nearby structures. Parcel C is located between the Fidelity’s West Office Tower, which will be 248 feet high when completed, and areas with height substitutions of 250 feet.

Because of the requirement to construct a street wall, and the 25,000 square foot limitation that will be imposed on the floorplate of any tower elements, the heights of much of the

area in jurisdiction will be significantly lower than the Chapter 91 permitted heights. The substitute heights are consistent with the general height parameters established in the Public Realm Plan.

Wind Analysis. Pedestrian wind levels at Location 24, the only Harborwalk location that is immediately adjacent to this site in the study area, are expected to be conducive to the anticipated uses of sitting, standing and walking. Northwest and southwest winds are predicted to be Category 1 under the MHP build condition for northwest and southwest winds. For southeast winds, Category 2 level winds are predicted. For northeast and east winds, Category 4 level winds are predicted. For east winds, Category 4 level winds are a deterioration of the Category 3 level winds that are predicted under the Chapter 91 build scenario.

According to Frank H. Durgin, PE, the substitute heights on this parcel are not expected to impact pedestrian level winds for the locations studied. Under Article 80, the project proponent will be required to conduct a full wind study of all surrounding areas for all buildings in excess of 150 feet in height.

Shadow Analysis. The representative MHP build-out indicates that buildings on Parcel C with the substitute height provisions will have some shadow impact on the shadow protection zone. See Figure 8-10. Shadows from the build-out of Parcel C do not begin to impact the shadow protection zone until mid-afternoon. From 9:00 a.m. until 2:00 p.m., shadows from Parcel C will fall on other build areas. Beginning at 2:00 p.m., shadows from Parcel C will begin to fall on the watersheet between Pier 4 and Commonwealth Pier and the portion of Northern Avenue immediately adjacent to the watersheet. The shadow cast on this basin continues to grow for the remainder of the afternoon.

During the Article 80 and MEPA review processes, the property owners will be required to determine the net new shadow impact on the shadow protection zone for the build-out of the development site. The actual build-out of Parcel C will dictate the actual level of net new shadow, and likewise the appropriate level of offsets.

Offsets for Impacts of Parcel C Height Substitution. Height substitutions are permitted in a Municipal Harbor Plan provided the plan specifies “alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith.” 310 CMR 9.51(3)(e). As discussed in greater detail above, this plan’s massing criteria ensures that buildings for nonwater-dependent use will be relatively modest in size, and minimize wind and shadow impacts. The wind analysis identified no wind impacts on waterfront areas on account of the substitute heights for Parcel C. The shadow analysis identified shadow impacts caused by build-out on Parcel C. The program of offsets developed for Parcel C is designed specifically to offset these additional shadow impacts.

The McCourt/Broderick offsets are a combination of measures that we believe will be effective at counteracting negative impacts to the pedestrian-level environment caused by the substitute provisions for the site. Like Fan Pier, an in-kind numerical offset for the Parcel C height substitution would undercut the rationale for the substitution, but other types of numerical offsets are appropriate.

Certain of the offsets are designated as required offsets. Although we do not know the exact amount of net new shadow that will be cast by an actual project on Parcel C, we can designate appropriate offsets to be used when the level of net new shadow is known.

Civic, Cultural and Educational Facilities (Required Offset). The McCourt/Broderick owners must include a major civic, educational or cultural facility as an offset. Possible uses are a new maritime museum, a public library or some type of performing arts and/or visual arts center. The mission of the new facility should be incorporated into the site's open space areas. The property owners may offset shadow impacts with the amount of floor space devoted to this use on a 1:1 basis.

Four-Season Room. To complement open space, cultural and civic uses on Parcel C, the property owners should consider incorporating a four-season room and/or an upper level viewing area. The property owners may offset shadow impacts with the amount of floor space devoted to these uses on a 1:1 basis.

Upper Floor "Active" Facilities of Public Accommodation. To the extent that any development project on Parcel C includes "active" facilities of public accommodation on upper floors, the owners may offset shadow impacts with the amount of floor space devoted to these uses at a ratio of 0.25:1.

Qualitative Offsets. To the extent that the amount of the above public benefits is insufficient to offset the full level of net new shadow generated by an actual project, the remaining level of net new shadow must be offset with additional qualitative offsets, such as providing a water transportation subsidy or service, or additional public water-related benefits above and beyond the Chapter 91 requirement for the site.

10.6.4 Parcel D: Substitutions And Offsets **(Substitutions: Lot Coverage, Open Space, Height)**

There is a small parcel of land located on Sleeper Street, adjacent to the Barking Crab parcel, that is within Chapter 91 jurisdiction. The parcel is denoted as Parcel D on Figure 10-5. Parcel D, which contains approximately 11,960 square feet of land, is not located directly on the waterfront. Parcel D is separated from the waterfront by the roadbed of Old Sleeper Street, and from other McCourt/Broderick parcels by Sleeper Street. Parcel D is not included in the ENF/PNF project filing.

Given the size and configuration of Parcel D and its location between the wharf structures of the Fort Point Historic Subdistrict and the federal courthouse, a similar, although

smaller, wharf-like structure is envisioned for this site. Similar to the Barking Crab parcel, future redevelopment of Parcel D could accommodate a small hotel, office or residential building. The program of substitutions developed for this site are designed to provide the owner with a viable redevelopment option that also promotes the public's rights in the tidelands. We recognize that it is possible that Parcel D may be combined with one or more adjacent parcels for redevelopment. As discussed below, in some instances, these different development scenarios result in different substitute provisions.

Parcel D Lot Coverage Substitution, Analysis and Offset. The Waterways Regulations require that, with respect to private as well as Commonwealth tidelands, structures for nonwater-dependent uses not exceed a 50% lot coverage ratio. Lot area used for water-dependent purposes is not subject to the 50% limitation. The DEP shall waive this numerical standard if the project conforms to an approved Municipal Harbor Plan which specifies alternative site coverage ratios and other requirements which ensure that, in general, buildings for nonwater-dependent purposes will be relatively condensed in footprint, in order that an amount of open space commensurate with that occupied by such buildings will be available to accommodate water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(d).

Because Parcel D is similar to the infill parcels in Fort Point Historic Subdistrict, the development guidelines for infill parcels in Fort Point Historic North are likewise applicable to Parcel D. See Section 11.2.1. For Parcel D, a lot coverage ratio greater than 50% will be permitted. No specific alternate lot coverage ratio is established. The property owner will be permitted the flexibility to establish an appropriate lot coverage ratio for the specific building parcel in consultation with the BRA design review staff during the Article 80 review process. If, however, this parcel is combined with the Barking Crab site for redevelopment, no lot coverage substitution will apply. The corresponding offset is that the owner will contribute an amount to the South Boston Waterfront Account of the Fund for Parks and Recreation in Boston for each square foot of open space not included on site. See Section 11.2.1.

Application of the lot coverage ratio of the Waterways Regulations to Parcel D would result in approximately 5,980 square feet of open space on the site. Because of the potential of any structure on the site to emulate the historic wharf structures to the south, a similar approach to lot coverage is favored. Many of the wharf buildings cover their entire lot with no open space, and often little or no setback from the sidewalk. This substitution may result in more open space located outside the MHP Area, but it also will help us to provide appropriately-scaled open spaces in the area.

This substitute provision will result in a larger building footprint on the site, but inasmuch as the maximum footprint on the site with the substitution is 11,960 square feet, the building will remain relatively condensed in footprint and within the range of existing wharf structures, which range from 6,000 to 15,000 square feet. Without this substitution, it is unlikely that any structure would be built on the site. A small residential, office or hotel structure at this location will do more to draw people across the Channel into the

Inner Harbor and the Fort Point Historic Subdistricts than the existing parking lot, inasmuch as development without this substitution is unlikely. By taking advantage of the Fund for Parks and Recreation, we can pool resources to acquire and develop a more significant park space for the area.

As discussed above, this substitution complies with the regulatory standard for lot coverage ratio substitutions. Notwithstanding the new lot coverage ratio, given the size of the parcel, any new building on the site will be relatively condensed in footprint. Although there will be a net loss of up 5,980 square feet of open space on the site, any negative impact of this substitution will be offset by the greater contribution that this site can make to the Inner Harbor if there were active uses on the site, instead of parking, and the contribution to the Parks Fund. This substitute provision and corresponding offset ensure that an amount of open space commensurate with that occupied by nonwater-dependent buildings remains available to accommodate water-dependent activity and public access associated therewith, with comparable or greater effectiveness than the provisions of the Waterways Regulations.

Parcel D Open Space Substitution, Analysis and Offset. For nonwater-dependent use projects located on Commonwealth tidelands, that portion of the site not located in the building footprint must include exterior open spaces for active or passive public recreation, such as parks, plazas and observation areas. The amount of such space shall be at least equal to the square footage of all Commonwealth tidelands on the project site landward of the project shoreline and not within the footprint of any buildings, less any space deemed necessary by the DEP to accommodate other water-dependent uses. The DEP shall waive this requirement if the project conforms to an approved Municipal Harbor Plan that specifies alternative requirements for public outdoor recreation facilities that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. 310 CMR 9.53(2)(b).

To the extent that the eventual build-out of Parcel D takes advantage of the lot coverage substitution, and results in less open space in the MHP Area, it will cause a proportionate reduction in exterior open spaces for active or passive recreation. The substitute provision for this requirement is to permit Parcel D to provide less space for public recreation facilities than required under the Waterways Regulations, provided that the this substitute provision may be used only in connection with the lot coverage substitution. The lot coverage substitution is offset with a contribution to the Parks Fund. This open space substitution is offset with the requirement that the contribution be sufficient, on a square footage basis, to design and construct first class urban park space. As discussed in Sections 8.9 and 11.2.1, the offset for this substitution is a one-time payment of \$75 per square foot plus an annual payment equal to \$2 per square foot to The South Boston Waterfront Account of the Parks Fund.

The Waterways Regulations permit us to specify alternative requirements for public outdoor recreation facilities that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. The requirement to contribute

to the Parks Fund allows us to aggregate the open space requirements of several parcels, in order to obtain a more significant park area. The requirement that the amount of that contribution be sufficient to build out first class urban park space ensures that we will obtain high quality recreational open space. The combination of the lot coverage substitution and the open space substitution together with their corresponding offsets meet the regulatory standard for approval.

Parcel D Height Substitution and Analysis. For Parcel D, as shown in Figure 10-6, the range of permitted heights under the Waterways Regulations is from 55 feet to approximately 90 feet. Height substitutions are permitted in a Municipal Harbor Plan provided the plan specifies “alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith.” 310 CMR 9.51(3)(e).

The proximity of this parcel to the wharf district to the south offers a solution to the issue of what height may be appropriate. The Children’s Museum and other nearby wharf structures range in height from 75 feet to 125 feet. With respect to Parcel D, as a small stand-alone parcel of less one-half acre that is less than 100 feet from the edge of Fort Point Channel, heights on the higher end of this scale would overwhelm the site. Accordingly, consistent with the historic context of the nearby wharf buildings, a height of 75 feet, which is within the range of heights permitted on the site under the Waterways Regulations, would be permitted for any redevelopment of this site. See Figure 10-7. This height also is consistent with heights proposed in the Public Realm Plan.

We have again used representative Chapter 91 and MHP build-outs, shown in map form in Figures 8-4 and 8-5 and in three dimensional form in Figures 8-6 and 8-8, to test the massing, wind and shadow impacts of the MHP build-out against the Chapter 91 build-out. In view of the fact that redevelopment of this parcel is unlikely without a lot coverage substitution, both the Chapter 91 build and MHP build scenarios incorporate a lot coverage ratio of in excess of 50%.

Massing Analysis. A height of 75 feet is permitted on approximately half of this parcel. This substitute provision simply levels off the permitted height for Parcel D at a height that is both within the range permitted under Chapter 91, consistent with the historic context and consistent with the height parameters established in the Public Realm Plan.

Wind Analysis. The Durgin Wind Study compared pedestrian level winds for representative Chapter 91 and MHP build-outs on the Harborwalk and in major public open space areas. The anticipated uses at each of these locations are various forms of passive recreation, including sitting, standing and walking. See Appendix 4.

The Durgin Wind Study indicates that the difference in pedestrian level winds along the Inner Harbor Subdistrict between the Chapter 91 build-out and the MHP build-out are

negligible. Both build-outs show minor improvements over the existing condition. For each of the five wind directions included in the study, three locations (6-8) will be most directly affected by build-out at this site. Of these 15 coordinates studied, the MHP build scenario causes a deterioration of pedestrian level winds over the Chapter 91 build scenario at one coordinate.

For northwest winds, which are predominant in spring, fall and winter months, wind conditions are Category 1 (Comfortable for Long Periods of Standing or Sitting) and Category 2 (Comfortable for Short Periods of Standing or Sitting) under the Chapter 91 and MHP build-outs. All locations remain the same for the existing, Chapter 91 build and MHP build scenarios.

For southwest winds, which are predominant in the summer months, wind conditions are primarily Category 2 and Category 3 (Comfortable for Walking) under the Chapter 91 and MHP build-outs. At location 7, pedestrian level winds deteriorate under the MHP build scenario from Category 2 under the Chapter 91 build to Category 3. All other locations remain the same for Chapter 91 build and MHP build scenarios.

Easterly winds occur approximately one-third of the time, primarily just before a storm, or in the summer as a light breeze. Northeast winds, which are primarily storm winds, are the most common of the easterly winds. Pedestrian level winds are Category 2 at location 6, Category 3 at location 7 and Category 4 (Uncomfortable for Walking) at location 8 for Chapter 91 build and MHP build conditions.

For easterly storm winds, pedestrian level winds are Category 1 and Category 2. All locations are the same for Chapter 91 build and MHP build scenarios.

For southeasterly winds, pedestrian level wind conditions are Category 1 and Category 2. All locations are the same for Chapter 91 build and MHP build scenarios.

At one coordinate (SW/7), the MHP build scenario is predicted to create a deterioration of the wind environment from Category 2 to 3. This increase does not cause the area to be unsuitable for the likely uses of the location. As demonstrated above, the wind impacts of the MHP build scenario compared to the Chapter 91 build scenario are negligible.

Shadow Analysis. As shown in Figures 8-10, from 9:00 a.m. until noon, shadow cast by a new structure on Parcel D will fall on the public space between Parcel D and the Barking Crab, leaving little of this area in sunlight. Beginning at noon, shadows begin to shift to the north of the site. By 2:00 p.m., the public space between Parcel D and the Barking Crab is in full sunlight. For the remainder of the afternoon, shadow from Parcel D falls on old Northern Avenue and the parcels to the east of the site.

We compared the shadow impact of the MHP build scenario and the Chapter 91 build scenario. As shown in Figure 8-12, our shadow studies indicate that the MHP build scenario casts no net new shadow on the shadow protection zone.

Offsets for Impacts of Parcel D Height Substitution. Height substitutions are permitted in a Municipal Harbor Plan provided the plan specifies “alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith.” 310 CMR 9.51(3)(e). As discussed in greater detail above, the massing analysis indicates that the full Chapter 91 build-out (including a lot coverage substitution) and the full MHP build-out are similar. The wind analysis identified no wind impacts on waterfront areas on account of the substitute heights for Parcel D. The shadow analysis identified no shadow impacts caused by the MHP build-out on Parcel D. Because our massing, wind and shadow analyses have indicated that this height substitution will not negatively impact the pedestrian level environment, no offsets are required.

10.7 THE BARKING CRAB PARCEL: SUBSTITUTIONS AND OFFSETS **(Substitutions: Water-Dependent Use Zone, Lot Coverage, Facilities of Private Tenancy and Building Height)**

The Barking Crab site, shown in Figure 10-6, is a small, slender parcel of waterfront property, 33 feet by 200 feet, with a total lot area of approximately 6,800 square feet. The site, approximately two-thirds of which is located on pilings, is located directly on Fort Point Channel between the old Northern Avenue Bridge and the Evelyn W. Moakley Bridge. The parcel is one of the few sites in the Inner Harbor MHP Area where the existing use is not surface parking. The site is home to a popular restaurant, a marina facility, Neptune Lobster & Seafood Co. and Neptune Marine Services.

In addition to its existing uses, the Barking Crab parcel can play an important role in providing public access to the City’s waterfront. With the Central Artery/Tunnel Project completing Harborwalk along much of Fort Point Channel and the Children’s Museum and MBTA completing Harborwalk in the area adjacent to the Barking Crab, this parcel is a critical link in the City’s Harborwalk chain and will connect the Federal Courthouse with the Children’s Museum. The City is exploring options for incorporating a temporary Harborwalk on the bed of old Sleeper Street along the landside of the existing structure.

Future redevelopment of the site could accommodate a small hotel, office or residential building, each of which would complement other uses planned for the Inner Harbor Subdistrict and the adjacent Fort Point Historic Subdistrict. The City would encourage the maintenance of the first floor restaurant, a popular destination with residents and visitors alike. It is also possible that the site may be used for expanded water-dependent uses, or some combination of nonwater-dependent and water-dependent uses. Given the physical restrictions of the site, it is important that the owner be provided with as much flexibility as possible so that any redevelopment will be economically viable. In order to permit redevelopment of this site for additional nonwater-dependent uses, or mixed water-

dependent and nonwater-dependent uses, a set of substitutions from the Waterways Regulations, discussed below, is required.

The Barking Crab is unique throughout the South Boston Waterfront because of its size, configuration and the fact that two-thirds of the site is located on piles. Also, unlike most of the parcels in the District with substitute provisions, there are existing uses on the site besides surface parking. At other sites in the District, we compared the impacts of the substitute provisions with a hypothetical Chapter 91 build-out because the existing condition is undeveloped parcels. Because the Barking Crab site includes existing uses and structures, we compare the impacts of the substitute provisions with the existing condition.

The program of substitutions and offsets developed for this site is based upon the small size and unique characteristics of this site, both of which limit the extent to which this site can be redeveloped, and the extent to which the site can provide offsets. The goal of these substitutions is to provide the owner with viable redevelopment options that either maintain the status quo or improve the extent to which the site promotes the public's rights in the tidelands. Without substitutions for several provisions of the Waterways Regulations, redevelopment for additional nonwater-dependent uses cannot occur. Without redevelopment, the City's goals for the Harborwalk and better public access at this site will remain unfulfilled.

Not only is the program of substitutions and offsets developed for the Barking Crab unique to the Barking Crab, but the manner in which we address substitutions and offsets for the site is as well. Generally, notwithstanding the number of substitutions we have included for this site, the negative impact of each of these substitute provisions is minimal when compared with the existing condition. It is only the combined impacts of the substitute provisions that rise to a level such that an offsetting measure is required. Accordingly, we treat all of the substitutions together for the purpose of developing appropriate offset options for the site.

Because it is the combination of substitutions that will make redevelopment of the site possible, which in turn will provide the Harborwalk link, in a very real sense, each substitute provision will play a role in increasing public waterfront access at this site. We view each of the substitute provisions as a necessary component of the "whole", and we view offsets for the site in the same way. We have included a menu of offsets for the Barking Crab which were carefully chosen to promote the public's rights in the tidelands within the confines of the site.

We recognize that it is possible that the Barking Crab parcel may be combined with one or more adjacent parcels for redevelopment. As discussed below, in some instances, these different development scenarios result in different substitute provisions.

10.7.1 Water-Dependent Use Zone – 310 CMR 9.51(3)(c)

The City's primary goal for this site is to provide public access along the edge Fort Point Channel. To that end, should redevelopment of the Barking Crab parcel for additional nonwater-dependent uses occur, the property owner will be required to incorporate a 12-foot wide Harborwalk on the site along the Channel on existing piles. Although this site is not designated as a primary or secondary water transit site in the City's Water Transportation Plan, all private landowners are encouraged to incorporate water transit uses into their development plans.

Barking Crab Water-Dependent Use Zone Substitution. The water-dependent use zone for the Barking Crab, shown in Figure 10-6, is 25 feet from the existing pier edge, the minimum depth permitted under the Waterways Regulations without a substitution, for a total setback area of approximately 5000 square feet. Because the site, as it now exists, is only 33 feet deep, no redevelopment of the site is possible for additional nonwater-dependent uses without a substitution for this provision. Different substitutions for this provision are proposed for this site, depending on whether it is redeveloped as a single parcel or combined with adjacent parcels.

If this site is developed as a single parcel, or combined with all or any portion of the adjacent City-owned parcel, the water-dependent use zone will be reduced to 0, provided that the first floor of any new structure incorporate a 12-foot wide Harborwalk along the Channel. See Figure 10-7. In view of the narrowness of the site, the owner will be permitted to provide Harborwalk in an arcade, similar to that which is permitted on Pier 4 and which already is in place at 303 Congress Street. The site's development program may be incorporated above the Harborwalk. If, however, the Barking Crab parcel is combined with Parcel D for redevelopment, no substitution applies. Any such reconfigured parcel would be required to meet the requirements of the Waterways Regulations for the water-dependent use zone, which would result in a water-dependent use zone of 25 feet.

Barking Crab Water-Dependent Use Zone Substitution Analysis. The Waterways Regulations permit a municipal harbor plan to specify alternative setback distances and other requirements which ensure that new buildings for nonwater-dependent use are not constructed immediately adjacent to a project shoreline, in order that sufficient space along the water's edge will be devoted exclusively to water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(c). As demonstrated below, the substitute configuration of the Barking Crab's water-dependent use zone, meets this standard.

The Barking Crab site is one of only two sites in the entire MHP Area for which a reduction in the size of the water-dependent use zone is proposed. The substitute water-dependent use zone is permitted only to the extent it is absolutely necessary – if the parcel remains “as is” or is combined with the adjacent City-owned parcel. The MHP

configuration is superior to the regulatory configuration in that it makes redevelopment of the site for additional nonwater-dependent uses, or some combination of water-dependent and nonwater-dependent uses, possible. By making such redevelopment possible, we obtain a very important Harborwalk link.

The Waterways Regulations take the position that buildings for nonwater-dependent use should not be constructed immediately adjacent to a project shoreline, in order that sufficient space be maintained along the water's edge for water-dependent activity, *as appropriate for the harbor in question*. One of the defining features of the Fort Point Channel is the way the buildings are constructed right up to the Channel's edge, a condition that already exists at this site. Continuing this unique condition at the Barking Crab location will help to maintain the historic condition without significant reduction in the amount of waterfront space available for water-dependent activity.

By permitting redevelopment, the substitute provision will improve the site's ability to promote water-dependent uses, particularly public access. Although reduction of the water-dependent use zone will result in a new structure being constructed immediately adjacent to the project shoreline, this will merely continue the existing condition at the site. The substitute water-dependent use zone, together with the requirement to provide Harborwalk, meets the regulatory approval standard.

10.7.2 Lot Coverage and Open Space – 310 CMR 9.51(3)(d)/310 CMR 9.53(2)(b)

The footprint of the existing structure is approximately 2,700 square feet, with the remainder of the site covered by timber wharf decking and accessory structures related to the restaurant and marine services. The City's primary open space and public access strategy for this site is completing the critical Harborwalk link between the courthouse and Children's Wharf. Accordingly, if there is any redevelopment of this parcel incorporating nonwater-dependent uses, the property owner will be required to complete Harborwalk along the edge of Fort Point Channel as described in Section 10.6.1.

Barking Crab Lot Coverage Substitution. The Waterways Regulation limit the lot coverage ratio of new structures for nonwater-dependent uses to 50%. For the Barking Crab site, similar to the infill parcels in Fort Point Historic Subdistrict, a lot coverage ratio greater than 50% will be permitted. No specific alternate lot coverage ratio is established. The property owner will be permitted the flexibility to establish an appropriate lot coverage ratio for the specific building parcel in consultation with the BRA design review staff during the Article 80 review process. If, however, this parcel is combined with Parcel D for redevelopment, no lot coverage substitution applies.

Barking Crab Lot Coverage Substitution Analysis. The Waterways Regulation require that, with respect to private as well as Commonwealth tidelands, structures for nonwater-dependent uses not exceed a 50% lot coverage ratio. Lot area used for water-dependent purposes is not subject to the 50% limitation. The DEP shall waive this numerical standard if the project conforms to an approved Municipal Harbor Plan which specifies alternative

site coverage ratios and other requirements which ensure that, in general, buildings for nonwater-dependent purposes will be relatively condensed in footprint, in order that an amount of open space commensurate with that occupied by such buildings will be available to accommodate water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(d).

The Barking Crab site contains approximately 6,800 square feet of land area. Applying a lot coverage ratio would yield approximately 3,400 square feet of open space. Given the size and unique configuration of the parcel, redevelopment incorporating nonwater-dependent uses is not possible without a substitution for this provision. The Barking Crab's close proximity to the historic wharf structures in the Fort Point Historic Subdistrict suggests that a similar approach to open space is appropriate for this site. Many of the wharf buildings cover their entire lot with no open space to speak of, and often little or no setback from either the sidewalk or the water's edge.

As with the infill parcels in the Fort Point Historic Subdistrict, because this lot is so small, any new structures necessarily will remain condensed in footprint, even if the lot coverage ratio is increased to 85%, similar to 303 Congress Street. While an additional small park in this area would, of course, add to public waterfront access at this location, it is extremely unlikely that the Barking Crab site would be built out without a lot coverage substitution. By permitting a viable mixed-use redevelopment option at this location, we can provide better public access, connecting the Harborwalks of the Fort Point Historic Subdistrict and the Inner Harbor Subdistrict.

One of the City's goals is to provide a variety of experiences along its waterfront. The Fort Point Channel has an intimate character that is not found elsewhere along the South Boston Waterfront. Larger sites in the Inner Harbor Subdistrict and throughout the South Boston Waterfront can provide the public with open spaces for gathering and recreation. This site can complete a Harborwalk link that is unique in its design and in the pedestrian experience that it provides. It is important that this Municipal Harbor Plan provide this type of flexibility for a site that is so unique.

As discussed above, this substitution complies with the regulatory standard for lot coverage ratio substitutions. Notwithstanding the new lot coverage ratio, given the size of the parcel, any new building on the site will be relatively condensed in footprint. Since redevelopment is unlikely to occur without this substitution, there is, in reality, no net loss of open space since the existing condition provides none. What we gain with this substitution is Harborwalk. This substitute provision ensures that an amount of open space commensurate with that occupied by nonwater-dependent buildings remains available to accommodate water-dependent activity and public access associated therewith, as appropriate for the harbor in question, with comparable or greater effectiveness than the provisions of the Waterways Regulations.

The Barking Crab Open Space Substitution. For nonwater-dependent use projects located on Commonwealth tidelands, the Waterways Regulations require that the portion

of the site not located in the building footprint must include exterior open spaces for active or passive public recreation, such as parks, plazas and observation areas. Substitutions for the lot coverage ratio necessarily result in a reduction in the amount of open space available for public recreation. As with other small parcels in the MHP Area, we not specified a specific substitute lot coverage ratio for the Barking Crab. Nonetheless, we know that a lot coverage ratio in excess of 50% will result in a corresponding loss of open space for public recreation on the site. The substitute provision for this requirement is to permit the Barking Crab site to provide less space for public recreation facilities than required under the Waterways Regulations, provided that the this substitute provision may be used only in connection with the lot coverage substitution.

The Barking Crab Open Space Substitution Analysis. The amount of exterior open space for public recreation shall be at least equal to the square footage of all Commonwealth tidelands on the project site landward of the project shoreline and not within the footprint of any buildings, less any space deemed necessary by the DEP to accommodate other water-dependent uses. The Waterways Regulations permit a portion of the open space located on Commonwealth tidelands to be used for public ways and above-ground parking facilities, provided that below ground facilities are not a reasonable alternative, and provided that the amount of space devoted to public vehicular use does not exceed the amount devoted to public pedestrian use. The DEP shall waive this requirement if the project conforms to an approved Municipal Harbor Plan that specifies alternative requirements for public outdoor recreation facilities that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. 310 CMR 9.53(2)(b).

The site currently offers no open space for public recreation. Redevelopment will provide space for public recreation in the form of Harborwalk. The substitute open space provision is an alternative requirement that will establish the site as a year-round locus of public activity in a comparable and highly effective manner, thereby meeting the regulatory standard for approval.

10.7.3 Facilities of Private Tenancy – 310 CMR 9.51(3)(b)

As with other parcels located in the Inner Harbor, the entire ground floor of the Barking Crab site must be devoted either to facilities of public accommodation or water-dependent uses. The existing restaurant on the site is popular with residents and visitors alike, and draws people to this section of the waterfront year round. If redevelopment of the site were to occur, we encourage the owner to maintain or even expand the restaurant so that it can continue to draw people across the Channel into the South Boston Waterfront throughout the year.

Barking Crab Substitution for Facilities of Private Tenancy. Residential uses are encouraged throughout the Inner Harbor in order to ensure that this new area becomes a true neighborhood as it is built out over the next several decades. The Barking Crab is not an exception, and likewise residential uses also will be encouraged for this site. Offices

and a small hotel are other possible uses for this site. As with other properties located in the Inner Harbor Subdistrict, however, offices and residential uses are permitted on the upper floors only.

Barking Crab Analysis of Substitution for Facilities of Private Tenancy. The Waterways Regulations prohibit locating nonwater-dependent facilities of private tenancy on pile-supported structures on flowed tidelands, or at the ground level of any filled tidelands within 100 feet of a project shoreline. The DEP shall waive this use limitation if the project conforms to an approved Municipal Harbor Plan which specifies alternative limitations and other requirements which ensure that no significant privatization of waterfront areas immediately adjacent to the water-dependent use zone will occur for nonwater-dependent purposes, in order that such areas will be generally free of uses that conflict with, preempt, or otherwise discourage water-dependent activity or public use and enjoyment of the water-dependent use zone, as appropriate for the harbor in question. 310 CMR 9.51(3)(b).

This substitute provision meets the regulatory standard of approval. The Barking Crab site is the only parcel in the MHP Area for which the City is seeking a waiver of this provision. The site has long been developed with pile-supported structures at the water's edge, so allowing substitution provisions on second and subsequent floors will not result in any net loss of open water. Given the small size of this site in the context of the entire MHP Area, permitting facilities of private tenancy on pile-supported structures over water at this location will not result in significant privatization of the waterfront area, particularly when compared to the existing condition.

By permitting a viable redevelopment option for this site, we increase the site's ability to support water-dependent uses because we make it possible to complete the Harborwalk link at this location, increasing public access opportunities beyond what currently exist at the site. We can provide the Barking Crab site with the same flexibility as other property owners in the subdistrict, and further the goal of the Public Realm Plan to create a highly active, mixed-use district, by permitting office and residential uses on the upper floors of the structure, without impacting the site's ability to promote water-dependent activity at the site.

10.7.4 Building Height – 310 CMR 9.51(3)(e)

Immediately to the south in the Fort Point Historic District, wharf structures that are 75 or 80 feet high are built right on the edge of the Channel. The goal of the Barking Crab height substitution is to permit similar heights on this parcel. Permitting a similar condition on the Barking Crab site will enhance, rather than diminish, the pedestrian experience along this portion of the waterfront.

Barking Crab Height Substitution. The Waterways Regulations permit heights of up to 55 feet within 100 feet of the mean high water mark. See Figure 10-6. As with Parcel D, above, the proximity of this parcel to the wharf district to the south offers a solution to the

issue of what height may be appropriate. Nearby wharf structures range in height from 75 feet to 125 feet. Consistent with the historic context of the nearby wharf buildings, a height of 75 feet will be permitted for any redevelopment of this site. See Figure 10-7. This height also is consistent with heights proposed in the Public Realm Plan.

Barking Crab Height Substitution Analysis. A Municipal Harbor Plan may specify alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith, as appropriate for the harbor in question.

The height substitution for this site creates an alternative height that is in keeping with the historic context and with the parcel's immediate surroundings. The massing, wind and shadow analyses, below, indicate little in the way of impacts on account of the substitute height.

Massing Analysis. A height substitution at this site serves several purposes. First, it will permit a height at this location that is consistent with historic wharf structures to the south. Second, the substitute height is designed to be sufficient to support the construction off the Harborwalk link at this site. Third, the 75-foot height is consistent with the height parameters established in the Public Realm Plan. When compared to the site's nearest neighbor, the federal courthouse, which is a much more massive structure, a 75-foot structure at this location is relatively modest in size.

Wind Analysis. The Durgin Wind Study compared pedestrian level winds for representative Chapter 91 and MHP build-outs on the Harborwalk and in major public open space areas. The anticipated uses at each of these locations are various forms of passive recreation, including sitting, standing and walking.

The Durgin Wind Study indicates that the difference in pedestrian level winds along the Inner Harbor between the Chapter 91 build-out and the Municipal Harbor Plan build-out are negligible. Both build-outs show minor improvements over the existing condition. For each of the five wind directions included in the study, three locations (6-8) will be most directly affected by build-out at this site. Of these 15 coordinates studied, the MHP build scenario causes a deterioration of pedestrian level winds over the Chapter 91 build scenario at one coordinate.

For northwest winds, which are predominant in spring, fall and winter months, wind conditions are Category 1 (Comfortable for Long Periods of Standing or Sitting) and Category 2 (Comfortable for Short Periods of Standing or Sitting) under the Chapter 91 and MHP build-outs. All locations remain the same for the existing, Chapter 91 build and MHP build scenarios.

For southwest winds, which are predominant in the summer months, wind conditions are primarily Category 2 and Category 3 (Comfortable for Walking) under the Chapter 91 and MHP build-outs. At location 7, pedestrian level winds deteriorate under the MHP build scenario from Category 2 under the Chapter 91 build to Category 3. All other locations remain the same for Chapter 91 build and MHP build scenarios.

Easterly winds occur approximately one-third of the time, primarily just before a storm, or in the summer as a light breeze. Northeast winds, which are primarily storm winds, are the most common of the easterly winds. Pedestrian level winds are Category 2 at location 6, Category 3 at location 7 and Category 4 (Uncomfortable for Walking) at location 8 for Chapter 91 build and MHP build conditions.

For easterly storm winds, pedestrian level winds are Category 1 and Category 2. All locations are the same for Chapter 91 build and MHP build scenarios.

For southeasterly winds, pedestrian level wind conditions are Category 1 and Category 2. All locations are the same for Chapter 91 build and MHP build scenarios.

At one coordinate (SW/7), the MHP build scenario is predicted to create a deterioration of the wind environment from Category 2 to 3. This increase does not cause the area to be unsuitable for the likely uses of the location. As demonstrated above, the wind impacts of the MHP build scenario compared to the Chapter 91 build scenario are negligible.

Shadow Analysis. The shadow impacts from the MHP build scenario are depicted in Figure 8-10. At the Barking Crab along Fort Point Channel, at 9:00 a.m., much of the Harborwalk and immediately adjacent watersheet is in shadow. By 10:00 a.m., the watersheet is largely free from shadow impacts. From 11:00 a.m. on, the watersheet and Harborwalk are largely free from any shadow impacts. Beginning at 2:00 p.m., the Barking Crab starts to cast shadows on the pedestrian space behind it, and continues to do so for the remainder of the afternoon. For the most part, with the exception of the earlier morning hours, most of the shadow protection zone areas along Fort Point Channel are in sunlight most of the day.

Figure 8-12 depicts net new shadow impacts for the substitute height. From 9:00 a.m. until 2:00 p.m., because of the way the Barking Crab structure is built right up to the edge of the Channel, a condition that is continued under the MHP build-out, net new shadow is cast on the Channel watersheet only. Beginning at 2:00 p.m., net new shadow attributable to the site is cast on old Northern Avenue, then begins to move around to the back of the site. Because of the small size of the structure in the MHP build scenario, and the relationship of the building to the edge of the Channel, the net new shadow will have little impact on the pedestrian-level environment.

10.7.5 Offsets for Impacts of the Barking Crab Substitutions

The program of offsets developed for the Barking Crab are specifically designed to offset negative impacts of the substitute provisions on water-related rights that are in excess of the negative impacts of the existing condition. Most of the substitute provisions do not generate impacts greater than the existing condition, particularly when weighed against the role each substitution provision will provide in improving public access to the site by making Harborwalk a possibility.

Determining the appropriate level of offsets for the Barking Crab is necessarily a qualitative determination. It is not possible to offset impacts with in-kind offsets, nor do the size, configuration and make-up of the site lend themselves to the application of performance standards as a mechanism for evaluating the appropriate level of offset.

Below is a list of offsetting measures that are designed to offset the combined negative impacts of the Barking Crab substitution provisions. The size and configuration of the site also limit the level of offset that redevelopment can support. The menu of offsets below were carefully chosen to promote the public's rights in the tidelands within the confines of the site. During the Article 80 review process, the most appropriate offset in light of the owners' development program will be determined.

Rooftop Viewing Area and Four-Season Room. The Barking Crab is an ideal location for a combined rooftop viewing area and four-season room. To offset negative impacts to public-water related rights caused by the combined effects of the substitution provisions increased shadow, less open space and facilities of private tenancy at the site, a rooftop viewing area/four-season room would provide people with a unique perspective on the Channel as well as the Inner Harbor. Public seating and other amenities must be available. The owner may include either an open roof deck, or provide a canopy-type roof to create a space that is available year-round. If the owner decides to incorporate the roof into the site's development program, a portion of the roof must be free and open to the public in accordance with the requirements of Section 8.9.

Upper Floor "Active" Facilities of Public Accommodation. Another possible offset is the inclusion of upper floor facilities of public accommodation. In order to qualify as an offset, upper level facilities of public accommodation must be "active" facilities, such as a restaurant or retail facility.

Water Transit Subsidy or Service. The owner of the Barking Crab has expressed interest in incorporating a water transportation service into this site. Such service can be used to offset impacts of the site's substitution provisions provided it does not conflict with the City's Water Transportation Plan.

Public Water-Related Facilities. Other possible offsets are public water-related facilities in excess of the Chapter 91 requirements for the site.

10.8 COMMONWEALTH FLATS DEVELOPMENT AREA

Massport owns approximately 70 acres of land including the Fish Pier and Commonwealth Pier in the Inner Harbor Subdistrict immediately adjacent to the Boston Marine Industrial Park. Approximately 40 acres of this total lies with the Designated Port Area or has previously received environmental permits. The remainder, Massport's Commonwealth Flats Development Area, shown in Figure 10-8, contains over 30 acres of land in the Inner Harbor Subdistrict. Approximately 11% of this area lies within Chapter 91 jurisdiction. On January 3, 2000, Massport filed a Draft Environmental Impact Report (Massport DEIR) which outlines Massport's long term development plans for these parcels and evaluates impacts for several development alternatives.

Massport's Commonwealth Flats Development Area (Commonwealth Flats) is not included in the MHP Area because Massport is not subject to this municipal harbor planning process. The Waterways Regulations require Massport and DEP to enter into a Memorandum of Understanding to govern Massport projects containing nonwater-dependent uses. Massport and DEP are concurrently negotiating a Memorandum of Understanding that will establish parameters for the development of nonwater-dependent uses on Massport-owned property in the South Boston Waterfront. Massport representatives, however, have been active in the City's municipal harbor planning process for South Boston, and are represented on the Municipal Harbor Plan Advisory Committee. Careful coordination between Massport and the BRA with respect to many development parameters such as open space, uses, setbacks and building heights is reflected in the recently filed Massport DEIR. Massport's development plans for this area provide important context for the areas included in this Municipal Harbor Plan.

Commonwealth Flats occupies an important transitional location between the mixed-use Inner Harbor Subdistrict and the Boston Marine Industrial Park. The project, as proposed by Massport, is a phased, mixed-use development of up to 3.4 million square feet over approximately 30-acres of land. Shown in Figure 10-8, the project site is loosely bounded by Northern Avenue to the north, the Massport Haul Road to the east, Summer Street to the south, and Viaduct Street to the west. The proposed development includes a mix of office, hotel, residential, retail, restaurant, cultural and other uses. It is anticipated that overall build-out for the entire area will take place over 20 years. Massport plans to incorporate capital infrastructure improvements into the project, including roadway, streetscape, open space, and utility systems improvements.

10.8.1 Consistency with the Public Realm Plan

Massport's planning for the Commonwealth Flats is largely consistent with the features of the Public Realm Plan. The development scenarios included in the Massport DEIR include smaller, pedestrian-scaled blocks, a mix of uses with a strong residential component, compatible density and scale of development and an open space plan that seeks to create a

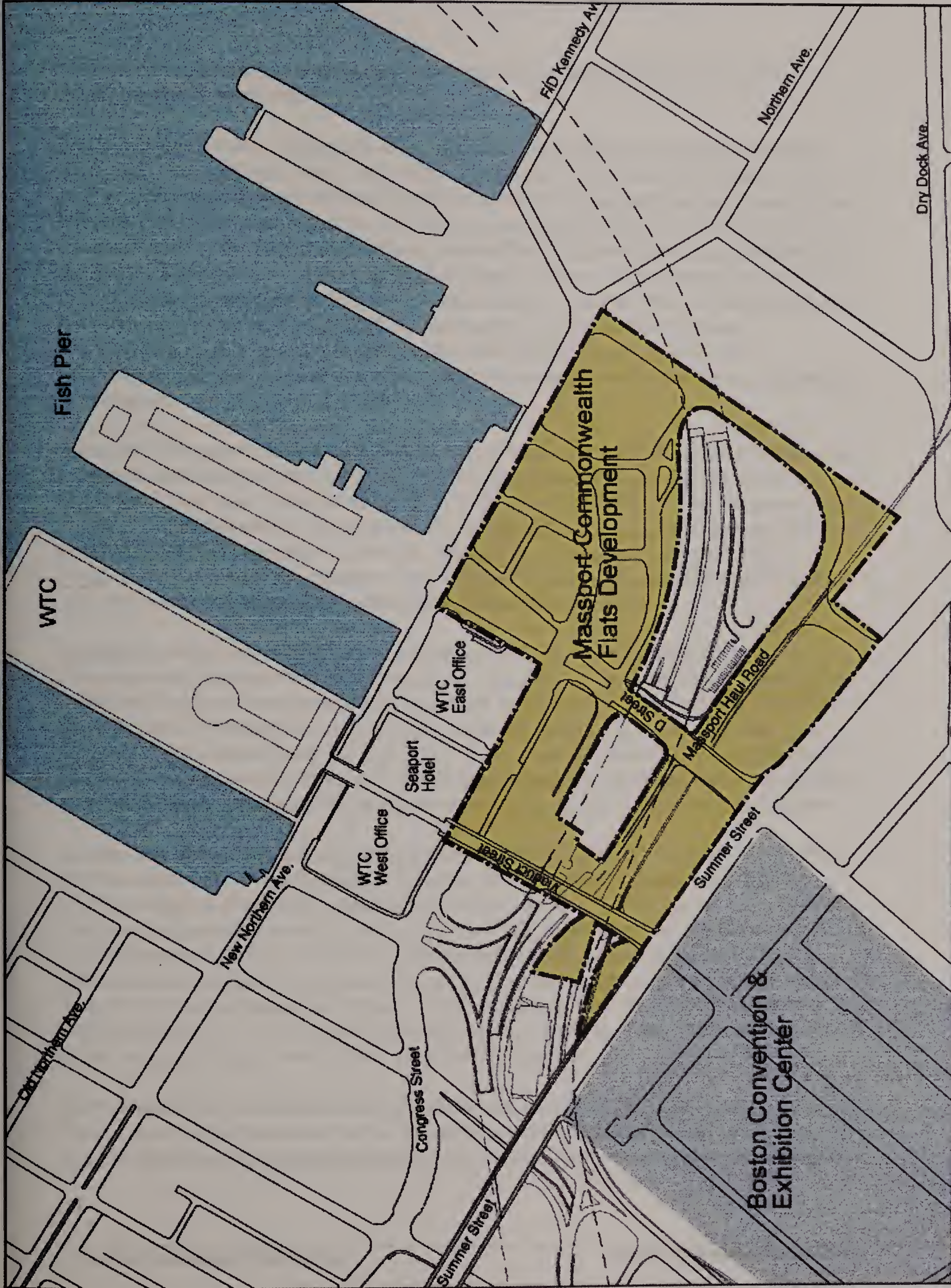


Figure 10-8 Commonwealth Flats Development Area

network of streetscape connections and public open spaces that provide new public amenities within the district.

Street and Block Plan. Massport's street and block plan is largely consistent with the street and block configuration in the Public Realm Plan. Commonwealth Flats includes smaller, pedestrian-scaled blocks and promotes physical, visual and functional connections between the neighborhoods and the waterfront. One major difference is the alignment of Congress Street. The Public Realm Plan proposed that Congress Street connect directly to the Boston Marine Industrial Park south of Northern Avenue. Massport has proposed that the Congress Street extension follow the configuration of Trilling Way and intersect with Northern Avenue across from Wharf 8. The recently completed South Boston Transportation Study by Louis Berger studied both of these configurations and recommends that the Congress Street extension terminate at Northern Avenue, as proposed by Massport.

Land Use. Massport's distribution of land uses includes a mix of office, hotel, residential, restaurant, entertainment and ancillary uses, which is consistent with the mix of uses promoted for the Inner Harbor Subdistrict in the Public Realm Plan. Most important to the development of this area as part of a true City neighborhood, Massport's planning includes a strong residential component. Since the filing of the Expanded Environmental Notification Form last year, Massport has increased its proposed residential build-out from 400,000 to 660,000 square feet to 800,000 to 1,000,000 square feet.

The greatest challenge to Massport in including residential uses in much of Commonwealth Flats is the area's proximity to industrial and port activities. Massport has prohibited residential uses from several locations in Commonwealth Flats that would be inappropriate for residential uses, such as locations adjacent to the Boston Marine Industrial Park and the Massport Haul Road. Residential and industrial and port uses can co-exist, however, provided adequate buffers are maintained. Massport should establish a clear set of design guidelines and performance criteria to guide development in this area.

Density and Scale. The building heights proposed by Massport for Commonwealth Flats are consistent with the heights proposed for the site in the Public Realm Plan. Building heights identified in the Public Realm Plan for the area are 150 feet (maximum) and a 150-foot base height with a possibility of heights up to 300 feet with a Planned Development Area designation. Heights proposed in the Massport DEIR range from 55 feet to approximately 260 feet. In addition, Massport's proposed heights increase as they step back from the water's edge, in keeping with Boston's tradition. Proposed projects also must take into account existing view corridors and the creation of new corridors and the urban design guidelines developed in the Public Realm Plan.

Open Space. The Public Realm Plan envisions a well-designed network of open spaces that creates a highly accessible, active and well-maintained waterfront supported by an array of public amenities and characterized by an ease of movement. Although different in

some specifics from the open space network of the Public Realm Plan, Massport's open space planning also expresses this overall vision of the public realm.

Massport's proposal includes a mix of large and small parks and plazas and landscaped areas that will provide a diversity of spaces and support a diversity of activities. Open spaces in Commonwealth Flats will create strong connections to Harborwalk and take advantage of panoramic views from strategic points. Building 4 (Jimmy's Harborside) is a small waterfront parcel located adjacent to the Commonwealth Flats Development Area. Massport is discussing with the current tenants of Building 4 the possibility of incorporating Harborwalk seaward of the site which would connect the Fish Pier to Wharf 8.

Massport's commitment to construct most aspects of the open space system in advance of most individual parcels being developed is a great benefit to the City and its residents. Also, Massport has made every effort to coordinate with the City and the BRA to ensure that the proposed open space system is consistent with the principles and design guidelines established in the Public Realm Plan. The BRA urges Massport to continue to coordinate the detail of design and development with the City to create a seamless transition between the open spaces built by Massport, the City and other area property owners.

10.8.2 Consistency with the South Boston Waterfront Municipal Harbor Plan

Despite the fact that Massport is not subject to the City's municipal harbor planning process, their proposal reflects a commitment to the City's overall objectives, particularly with regard to public benefits, maximizing water-dependent uses, maintaining modest heights, encouraging ground floor public uses, creating links to the Harborwalk, and providing public access to and use of the waterfront. In addition, Massport remains committed to participating in a public review process involving the South Boston community and advocacy groups, and they have indicated in the Massport DEIR that the Memorandum of Understanding will be submitted for public review.

Open Space and Lot Coverage. The Waterways Regulations limit lot coverage ratios to 50%, and this Municipal Harbor Plan permits substitutions for this provision only in very limited circumstances. Large property owners are limited to 50% lot coverage for property located within Chapter 91 jurisdiction. Massport will be asked to consider this same lot coverage ratio. Because such a small portion of the Commonwealth Flats Development Area is located within Chapter 91 jurisdiction, from a planning perspective, a portion of the "jurisdictional" open space may be more appropriately located outside Chapter 91 jurisdiction.

This Municipal Harbor Plan also establishes a set of baseline lot coverage and open space standards applicable to all property owners in the MHP Area. The BRA will be working with Massport to ensure that the baseline open space requirements are respected in the development of Commonwealth Flats. These standards cover, among other things, public streets and sidewalks, public space amenities, maintenance plans and standards,

programming of exterior public areas, signage and maps. A detailed discussion of these baseline standards is contained in Section 7.5.

Building Height. In order to ensure that the ground-level environment remains pedestrian-friendly, this Municipal Harbor Plan establishes wind and shadow standards for projects seeking to take advantage of height substitutions (See Section 8.7). For those locations within Chapter 91 jurisdiction for which proposed heights are in excess of the Chapter 91 heights, we ask that Massport ensure that developers of nonwater-dependent use projects conduct the wind and shadow analyses detailed in Section 8.7, and mitigate and offset any negative impacts caused by such heights.

Facilities of Public Accommodation. The Waterways Regulations require 100% of the ground floor of a building containing nonwater-dependent uses to be devoted to facilities of public accommodation. Requiring ground floor facilities of public accommodation is an important component of the City's strategy to activate the South Boston Waterfront. Accordingly, the owners of large property holdings in the area are required to maintain this percentage. We ask that Massport explore maintaining the 100% ground floor facilities of public accommodation throughout the Commonwealth Flats Development Area to the extent feasible, not just those parcels located within Chapter 91 jurisdiction in order to contribute the activation of the waterfront area and create pedestrian flow between the convention center and the waterfront.

In addition to including restaurants, retail shops and public lobby areas on the ground floors of new structures, with respect to structures located at or near the waterfront, we ask that Massport consider including four-season rooms and upper floor viewing areas. These spaces will extend the appeal of the waterfront area to later in the season, and support other public attractions located nearby. We understand that Fidelity is incorporating a winter garden into the East Office Tower that is slated for completion this summer, and this precisely the type of use that we feel should be incorporated into the Commonwealth Flats Development Area at appropriate locations. Additional guidance on four-season rooms and upper floor viewing areas, can be found in Section 8.9.

Because the South Boston Waterfront District will be a neighborhood in addition to a new waterfront destination, a significant number of new residential units will be included in area developments. The Massport DEIR indicates that Massport's development program for Commonwealth Flats includes a total of approximately 600-800 housing units. These units will be set within an overall mixed-use program. In order to accommodate the needs of new residential uses, a portion of the ground floor may be required for residential lobby space and other upper floor accessory uses. To ensure that ground floor space that is required for upper floor accessory uses has the least possible negative impact on public water-related interests, property owners are required to limit residential lobby and accessory uses to 20% of the building footprint, and to locate lobbies and entrances away from the waterside of waterfront buildings. These requirements will minimize the negative impact of reducing the amount of ground floor space that will be devoted to facilities of public accommodation or water-dependent uses, while giving necessary support to the

residential uses that are so important to creating a true neighborhood. Massport should incorporate these principles into their development.

Water-Dependent Use Zone. To ensure that throughout the South Boston Waterfront the water-dependent use zone is developed in a manner that will support and provide for a variety of water-dependent uses, Section 7.3 of this Municipal Harbor Plan establishes a series of general standards and principles to govern the design and development of this important resource. Although the Commonwealth Flats Development Area is not located directly on the waterfront, and therefore has no water-dependent use zone, the area nonetheless has a role to play to support water-dependent uses. New development must not be permitted to block access to and through the waterfront. Visible, accessible connections to Harborwalk and water transit opportunities must be created. Also, areas adjacent to water-dependent use zones should be available for open space and public access.

10.9 CONSISTENCY WITH STATE TIDELANDS POLICY OBJECTIVES

Standards for approval of a Municipal Harbor Plan are set forth at 301 CMR 23.05 and require consistency with state tidelands policy objectives, as set forth in the state Waterways Regulations at 310 CMR 9.00, and summarized in the MHP Regulations at 301 CMR 23.05(3)(a). The MHP Regulations identify ten primary state tidelands policy objectives. The manner in which the South Boston Waterfront Municipal Harbor Plan is consistent with each of these objectives, including the substitute and offset provisions in the Inner Harbor MHP Area, is discussed in more detail below.

Policy Objective #1 - To ensure that development of all tidelands complies with other applicable environmental regulatory programs of the Commonwealth, and is especially protective of aquatic resources within coastal Areas of Critical Environmental Concern, as provided in 310 CMR 9.32(1)(e) and 9.33.

The MHP Area does not include an Area of Critical Environmental Concern. However, as part of Large Project Review under Article 80 of the Boston Zoning Code, the BRA requires the preparation of a Project Impact Report that addresses urban design and environmental impacts, such as wind, shadow, daylight, solar glare, air and water quality, geotechnical impacts and solid and hazardous wastes. This intensive review process supplements the Environmental Impact Report required under MEPA. A number of other agencies, such as the Boston Transportation Department, the Boston Water and Sewer Commission, the Massachusetts Water Resources Authority, the Massachusetts port Authority and the Massachusetts Bay Transportation Authority, may participate in the Large Project Review process to help ensure that the concerns of all applicable regulatory programs are adequately addressed.

Policy Objective #2 - To preserve any rights held by the Commonwealth in trust for the public to use tidelands for lawful purposes, and to preserve any public rights of access that are associated with such use, as provided in 310 CMR 9.35.

Section 9.35 of the Waterways Regulations require that all tideland projects preserve the public's rights of navigation, free passage over and thorough the water, fishing, fowling and the right to walk or pass freely for purposes of fishing, fowling or navigation, and on Commonwealth tidelands, the right to walk or pass freely for all lawful activities. As more particularly described below, the provisions of this Municipal Harbor Plan as they pertain to the Inner Harbor Subdistrict preserve the rights held by the Commonwealth in trust for the public to use tidelands for lawful purposes and the public's rights of access that are associated with such use, as required by 310 CMR 9.35.

Chapter 7 of this Municipal Harbor Plan includes extensive Open Space and Public Space Baseline Requirements and Guidelines that are applicable to all projects in the MHP Area. One of the primary purposes of these requirements is to ensure that open spaces and public spaces in the MHP Area are designed, constructed, maintained and programmed in a manner that not only preserves the public's rights in the tidelands, but enhances them as well. Chapter 7 addresses the following:

- Open Space and Public Access Plan
- Water Transit Requirements
- Harborwalk
- General Standards and Guidelines for the Watersheet
- Lot Coverage Calculation
- 24 Hour Public Access
- Public Space Amenities
- Maintenance Plan and Standards
- Programming and Activation of Public Spaces
- Signage, Maps and Information
- Urban Design Guidelines
- Universal Access Design Standards

To the extent that certain of the issues addressed in Chapter 7 also are addressed in the Waterways Regulations, the Chapter 7 requirements generally are more demanding. For example, with respect to the lot coverage calculation, the Waterways Regulations permit up to 25% of a lot area to be devoted to roadways and surface parking. This Municipal Harbor Plan prohibits surface parking facilities, and limits the lot area that may be devoted to roadways to 20%. Also, while the Waterways Regulations require compliance with the ADA requirements and guidelines, Section 7.7.2 of this Municipal Harbor Plan establishes detailed Universal Access Design Standards for projects designed to make the waterfront and watersheet accessible to people of all ages and abilities.

Chapter 7 also establishes requirements for which there is no counterpart in the Waterways

Regulations, all of which will further enhance the public's rights in the tidelands, as well as their ability to exercise those rights. For example, Section 7.5 regarding open space and public space includes the requirement to incorporate cultural, historic and educational uses and programming into projects, as well as requirements to ensure that as new public spaces are designed and constructed, they are able to accommodate a variety of programming options, from the occasional festival to the space for quiet relaxation and reflection. Section 7.7.1 establishes detailed urban design guidelines many of which are geared toward enhancing the pedestrian experience by requiring, among other things, the preservation of existing view corridors, the creation of new view corridors and that building mass be divided vertically to establish a pedestrian-scale.

The substitution and offset provisions for the Inner Harbor Subdistrict also preserve and the public's rights in the tidelands. The primary substitutions sought for large development parcels in the Inner Harbor Subdistrict are substitutions for the water-dependent use zone and height provisions of the Waterways Regulations.

The purpose of the water-dependent use zone is to maintain sufficient space along the water's edge to support the site's water-dependent activities, including public access. A high level of activation is planned for the watersheet of the Inner Harbor Subdistrict. New public access piers, public marinas, water transit facilities and a variety of boating activities on the water are planned for the watersheet, and all manner of supporting activities are planned for the landside. We have developed substitute water-dependent use zones for the Fan Pier and Pier 4 that will be more conducive to the water-dependent uses planned for these sites and will not result in the loss of any setback area.

With respect to the reconfigured water-dependent use zones at these two locations, it is possible to offset decreases in the water-dependent use zone with corresponding increases on the same site without undercutting the rationale for the substitution. In fact, the offset for the reconfigured water-dependent use zone is, in essence, built into the substitution. Because there is no net loss in setback area, each reduction in the setback is offset on site by a corresponding increase on site. In each case, as required by the Waterways Regulations, the substitute water-dependent use zone will preserve the public's rights in the tidelands because it is configured to ensure that new buildings for nonwater-dependent use are not constructed immediately adjacent to a project shoreline, in order that there is a sufficient and appropriate amount of open space along the water's edge to accommodate the water-dependent uses planned for the site with comparable or greater effectiveness than the Chapter 91 configuration.

Height substitutions and corresponding offsets also were developed for the large development parcels in the Inner Harbor Subdistrict. The City has developed an alternative series of heights for the major development parcels in the Inner Harbor that will better achieve the multiple goals of urban density, street-sensitive urban design and variation in building forms. The heights, shown in Figure 10-3, range from no build zones of varying depths at the water's edge to a maximum of 300 feet for a few buildings located furthest

from the water. In each case, the height substitution proposed here will also require compliance with the following criteria:

- a. No building may exceed 300 feet;
- b. For parcels located north of old Northern Avenue, the average building height must not exceed 150 feet (taking into account base elements and upper elements);
- c. Buildings must include a street wall no greater than 75 to 85 feet in height;
- d. Tower elements may not exceed 25,000 square feet floorplate;
- e. Negative impacts to the pedestrian-level environment must be offset in accordance with Sections 8.7 and 8.9; and
- f. A project must fulfill all the requirements of Boston Zoning Code Article 80 Design and Development Review and Planned Development Area provisions, including providing public benefits determined by the BRA for the approval of building heights in excess of 150 feet.

The planning and design principles set forth in the Public Realm Plan provide the framework for these proposed height zones and criteria. A base podium height of 75-85 feet will continue the predominant form of the nearby Boston Wharf district. Elements rising above the base heights will be distinguished from the base by cornice lines, materials and setbacks. In order to establish a pedestrian scale and maintain views and a sense of openness, the floor plates of upper elements will be limited to 25,000 square feet. The permitted heights will step up as the site moves back from the Harbor's edge, maintaining the tradition of Boston's waterfront neighborhood heights stepping back from the water and creating a mid-scale district as opposed to recreating the downtown Financial District. Building massing will be required to assure adequate light and sunshine for the surrounding watersheet and waterfront areas, especially during the periods of the year the site would be most actively used by the public.

The Waterways Regulations require that a Municipal Harbor Plan with height substitutions contain "alternative height limits and other requirement which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith." 310 CMR 9.51(3)(e). As discussed in greater detail in Sections 10.2, 10.3, 10.4 and above, the height substitutions and offsets for the Inner Harbor Subdistrict meet the standard for approval.

Inasmuch as the public's rights in the tidelands could be affected by the height substitutions, as required by the Waterways Regulations we studied the massing, wind and shadow impacts of the substitute height provisions in order to ensure that the pedestrian-level environment will remain conducive to water-dependent activity and public access. The massing criteria will ensure that new structures for nonwater-dependent uses will remain relatively modest in size when compared to the Chapter 91 requirements, the existing built environment in the vicinity and the planned built environment in the vicinity. The Durgin Wind Study has indicated only modest wind impacts attributable to the

substitute heights, which are easily addressed through mitigation measures. Our shadow studies have indicated that the substitute heights will have shadow impacts in excess of the shadow impacts of the Chapter 91 heights. To offset this additional shadow impact, we identified the types of public benefits that we believe appropriately offset the negative impacts of shadow. We have developed performance standards for each of these benefits that projects must meet in order to take advantage of the height substitutions in this Municipal Harbor Plan. The height substitutions, together with the massing criteria and offsetting measures, ensure that the public's rights in the tidelands are protected.

A program of substitutions and offsets also was developed for portions of building parcels that are located in jurisdiction. This Municipal Harbor Plan includes lot coverage, open space and height substitutions for these parcels, denoted as Parcel A, B and C in Figure 10-5. The lot coverage and open space substitutions will permit lot coverage ratios in excess of 50%, and consequent loss of open space for public recreation, provided that the same amount of open space is incorporated elsewhere within the development site. Thus, although there will be less open space within Chapter 91 jurisdiction, the public's rights in the tidelands are protected because there will be no net loss of open space for public recreation and the additional flexibility provided by the substitution and offset will enable developers to site the additional open space to the greatest advantage of the public. The height substitutions developed for these parcels are to permit buildings on the portion of these parcels that are in jurisdiction to rise to 250 feet. These parcels, together with the portion of the development sites that are not within Chapter 91 jurisdiction, will be subject to the same massing criteria and wind and shadow analyses as other large development parcels in the Inner Harbor Subdistrict in order to ensure that the pedestrian-level environment remains conducive to water-dependent activity, thereby protecting the public's rights in the tidelands.

A program of substitutions and offsets also was developed for Parcel D on Sleeper Street and the Barking Crab site. In each case, the substitutions and offsets are based upon the small size and unique characteristics of the site. For Parcel D, substitutions for lot coverage, open space and height are included, together with corresponding offsets. For the Barking Crab site, substitutions for the water-dependent use zone, lot coverage, open space, facilities of private tenancy and height provisions of the Waterways Regulations are included. In both cases, the program of substitutions and offsets are designed to provide the owner with viable redevelopment options that also preserve the public's rights in the tidelands. Also, as discussed in greater detail in Sections 10.6.4 and 10.8, the substitutions and offsets for these parcels meet the regulatory standard of approval.

Policy Objective #3 - To preserve the availability and suitability of tidelands that are in use for water-dependent purposes, or which are reserved primarily as locations for maritime industry or other specific types of water-dependent use, as provided in 310 CMR 9.32(1)(b) and 9.36.

The Inner Harbor Subdistrict has frontage on both the Harbor and Fort Point Channel. On

the Harbor edges, Fan Pier Cove is not currently in use for water-dependent purposes. The basin between Pier 4 and Commonwealth Pier currently includes the Spirit of Boston and a water transit terminal, both of which are adjacent to Commonwealth Pier. Basin A includes the Rowes Wharf water transportation facility, as well as a public dock at the Federal Courthouse. Hook Lobster Company, Neptune Marine Services, Neptune Lobster & Seafood Co., and a marina facility also are located in Basin A.

The Public Realm Plan and this Municipal Harbor Plan envision a highly active new public destination at Fan Pier Cove, with public access piers, a public marina, water transit facility and a variety of bating activities. Planned infrastructure improvements, such as dredging of the Cove and a new breakwater/wave attenuation structure will improve the Cove's capacity to support water-dependent uses. Possible new uses envisioned for the basin between Pier 4 and Commonwealth Pier are an expansion of the water transit facility and dockage for vessels that need the basin's deep-water access, such as small cruise ships, historic or educational vessels. These uses are compatible with existing uses in the basin and will not cause a deterioration of the availability or suitability of tidelands that are in use for water-dependent purposes.

The Public Realm Plan envisions a variety of new public water-dependent structures and uses in and along Fort Point Channel, including water transportation, small boat rentals, educational and cultural facilities and, of course, Harborwalk. As part of the public process for this Municipal Harbor Plan, the BRA formed the Fort Point Channel Working Group, made up of members of the Municipal Harbor Plan Advisory Committee, property owners along the Channel and other interested parties. The goal of the Fort Point Channel Working Group is to develop a Public Activation Plan for the Channel that will include a set of preferred implementation strategies to achieve the plan. The purpose of the Public Activation Plan is to provide a blueprint for the development of new uses and structures that will make the make Fort Point Channel a great civic space.

Policy Objective #4 - To ensure that all licensed fill and structures are structurally sound and otherwise designed and built in a manner consistent with public health and safety and with responsible environmental engineering practice, especially in coastal high hazard zones and other areas subject to flooding or sea-level rise, as provided in 310 CMR 9.37.

Although project drawings are reviewed by BRA planners as part of development review under Article 80, the city does not have the primary responsibility for assuring the structural soundness of buildings. Issues of building integrity are regulated by the State Building Code, and plan review is undertaken by state inspectors. Plans for building in flood zones are reviewed by the Federal Emergency Management Agency. This Municipal Harbor Plan is fully consistent with the effective implementation of Policy Objective #4 by the proper agencies.

Policy Objective #5 - To ensure patronage of public recreational boating facilities by the general public and to prevent undue privatization in the patronage of private recreational boating facilities, as provided in 310 CMR 9.38; and to ensure that fair and equitable methods are employed in the assignment of moorings to the general public by harbormasters, as provided in 310 CMR 9.07.

The placement on a temporary basis of moorings, floats, or rafts, including marinas, and vessels held by bottom anchor is subject to an annual permit from the harbormaster. In some instances a public hearing is required and the harbormaster's written determination must include certain findings, including that the project will serve a proper public purpose and not interfere with navigation, among others. These instances include floats or rafts that extend beyond the state harbor line, encompass an area greater than 2,000 square feet, or constitute a marina. 310 CMR 9.07(2)(b). Marinas must also conform to the requirements of 9.39(1). DEP may review the harbormaster's permit within 30 days and may affirm it, set it aside or amend it as it deems necessary. 310 CMR 9.07(2).

Because watershed use and management is increasingly becoming a planning issue, the BRA would like the opportunity to provide comment on all new 10A permit applications for moorings, floats, rafts, marinas and permanently-moored vessels within the watershed of the South Boston Waterfront Municipal Harbor Plan area, whether or not they meet the requirement for a public hearing, in order to evaluate such proposals against the City's planning efforts. Therefore, for proposed activities in the watershed of the MHP Area, the BRA is requesting notification and to be given 30 days to provide comment to the harbormaster and/or DEP for consideration in issuing permits. Future reconfiguration of marinas should also be subject to BRA review and comment to the harbormaster and to DEP. It is noted that Massport does not acknowledge BRA jurisdiction within its watershed; nonetheless, the opportunity for the BRA to provide comment formally or informally will assist in achieving coordination and an overall vision for waterside activities.

In addition, this Municipal Harbor Plan requires that marinas in the South Boston Waterfront comply with the use standards for public recreational boating facilities found in 310 CMR 9.38(1), in order to ensure that marina facilities in the South Boston Waterfront are available to the general public.

Policy Objective #6 - To ensure that marinas, boatyards and boat launching ramps are developed in a manner that is consistent with sound engineering and design principles, and include such pumpout facilities and other mitigation measures as are appropriate to avoid or minimize adverse impacts on water quality, physical processes, marine productivity and public health, as provided in 310 CMR 9.39.

The City's review of any such facilities will be coordinated with state project reviews, and the City will defer to the state with regard to detailed engineering requirements for marinas, docks, and other facilities. This Municipal Harbor Plan is fully consistent with

the effective implementation of such requirements.

Policy Objective #7 - To ensure that dredging and disposal of dredged material is conducted in a manner that avoids unnecessary disturbance of submerged lands and otherwise avoids or minimizes adverse effects on water quality, physical processes, marine productivity and public health, as provided in 310 CMR 9.40.

This Municipal Harbor Plan does not address dredging or disposal of dredged material. This Municipal Harbor Plan is fully consistent with the effective implementation of Policy Objective #7.

Policy Objective #8 - To ensure that nonwater-dependent use projects do not unreasonably diminish the capacity of any tidelands to accommodate water-dependent use, as provided in 310 CMR 9.51.

In order to ensure that nonwater-dependent use projects do not unreasonably diminish the capacity of tideland areas to accommodate water-dependent use, the Waterways Regulations establish baseline requirements regarding the use and dimensions of structures for nonwater-dependent uses. This provision of the Waterways Regulations establishes, among other things, building heights, the dimensions of water-dependent use zones, lot coverage ratios. This provision also establishes standards for a municipality to develop substitute use and dimensional standards.

This Municipal Harbor Plan includes substitute provisions for the water-dependent use zone, lot coverage and building height provisions of 310 CMR 9.51 for the Inner Harbor Subdistrict. Also included are a series of offsets that are carefully targeted to offset the negative impacts to the public water-related rights, if any, that are attributable to a particular substitute provision. As discussed in greater detail in Sections 10.2, 10.3, 10.4, 10.5 and 10.6, each substitute provision and corresponding offset meet the regulatory standard for approval, thereby ensuring that the portion of the Municipal Harbor Plan that pertains to the Inner Harbor Subdistrict does not unreasonably diminish the capacity of the tidelands to accommodate water-dependent use.

Policy Objective #9 - To ensure that nonwater-dependent use projects on any tidelands devote a reasonable portion of such lands to water-dependent use, including public access in the exercise of public rights in said lands, as provided in 310 CMR 9.52.

This provision of the Waterways Regulations establishes baseline requirements for public water-related facilities including facilities that generate water-dependent activity and pedestrian access networks. In applying these requirements, DEP will give particular consideration to applicable guidance specified in a municipal harbor plan. This Municipal Harbor Plan does not include substitutions for this provision of the Waterways

Regulations. Chapter 7, however, entitled Open Space and Public Space Baseline Requirements and Guidelines, establishes a series of requirements and guidelines designed to ensure that both the waterfront and watersheet are open and accessible to the public in a meaningful way.

Section 7.4 establishes general standards and guidelines for the use of the watersheet that are applicable throughout the South Boston Waterfront. Development projects on the South Boston Waterfront should include facilities appropriate to each site that promote water-based public activity, such as ferries for commuters and excursion passengers, water shuttles and water taxis, public landings, fishing areas, docks for the charter or rental of vessels, and floating barges for public performances or for public access. A variety of recreational uses should also be accommodated (sailing, kayaking, pedal boats, rowing) provided these activities are available for patronage by the general public.

Recreational activities should be located in areas where they will not interfere with navigation or water transportation services and where water quality and environmental conditions are suitable. These activities should have associated landside support, such as a boat house or a structure with lockers, restrooms, and some food service.

Water-based facilities should be designed to relate well and function together with landside public areas (whether interior or exterior) and pedestrian amenities, such as the Harborwalk, parks, plazas and play areas, ferry waiting areas, restrooms, boat houses, and fishing-related services.

Some of the uses appropriate to the South Boston Waterfront watersheet are:

- Water Transportation Terminals
- Marinas
- Dockage at Seawalls and Bulkheads
- Shoreline Walkways and Safety Ladders
- Public Landing/Short-Term Dockage
- Transient Dockage for Visiting Boats
- Fishing and Fishing Piers
- New Piers and Floating Structures

The program and type of use included in any one development site will depend on a number of factors, including the location of the site, the proposed development program, and navigational conditions, among others. The type and location of watersheet uses will be determined through the City's Article 80 project review process and the DEP Chapter 91 licensing process.

Section 7.3 includes baseline requirements for water-dependent use zones. This section incorporates the City's Harborwalk standards into the Municipal Harbor Plan, which are more detailed than the requirements of the Waterways Regulations. Section 7.5 includes

requirements applicable to all open and public spaces that address public space amenities and ensuring that people have the amenities that they need to be able to enjoy the waterfront, from benches and public restrooms to fishing pole and small boat rentals. Section 7.5 also includes requirements for historic, cultural and educational programming, signage, maps and information that are designed to enhance the experience that the waterfront can provide.

Policy Objective #10 - To ensure that nonwater-dependent use projects on Commonwealth tidelands, except in Designated Port Areas, promote public use and enjoyment of such lands to a degree that is fully commensurate with the proprietary rights of the Commonwealth therein, and which ensures that private advantages of use are not primary but merely incidental to the achievement of public purposes, as provided in 310 CMR 9.53.

Section 9.53 establishes heightened performance standards for nonwater-dependent use projects that are constructed on Commonwealth tidelands. Nonwater-dependent use projects are required to attract and maintain substantial public activity on the site on a year-round basis through the provision of facilities that promote water-based activity, exterior open space for active or passive recreation and interior facilities of public accommodation. The Waterways Regulations establish baseline performance standards that a project must meet in order to satisfy this requirement.

This Municipal Harbor Plan includes substitutions for this provision in conjunction with the lot coverage substitutions for the Barking Crab, and Parcels A, B, C and D. To the extent that these parcels are permitted to exceed the 50% lot coverage ratio of the Waterways Regulations, there will be a corresponding reduction in the amount of open space available for public recreation. Appropriate offsets, such as a contribution to a new account for the South Boston Waterfront in the Parks Fund that is sufficient to design, construct and maintain first class urban park space, or incorporating the same amount of public recreational open space elsewhere in a development site, also are included. As discussed in greater detail in Sections 10.5 and 10.6, these substitutions and offsets meet the regulatory standard for approval.

No substitutions for the requirement that the ground floor of any structure containing nonwater-dependent facilities of private tenancy be devoted to facilities of public accommodation are included in this Municipal Harbor Plan.

Chapter 7 of this Municipal Harbor Plan includes extensive Open Space and Public Space Baseline Requirements and Guidelines that are applicable to all projects in the MHP Area. One of the primary purposes of these requirements is to ensure that open spaces and public spaces in the MHP Area are designed, constructed, maintained and programmed in a manner that ensures that the South Boston Waterfront will become an exciting new destination. Chapter 7 addresses the following:

- Open Space and Public Access Plan
- Water Transit Requirements
- Harborwalk
- General Standards and Guidelines for the Watersheet
- Lot Coverage Calculation
- 24 Hour Public Access
- Public Space Amenities
- Maintenance Plan and Standards
- Programming and Activation of Public Spaces
- Signage, Maps and Information
- Urban Design Guidelines
- Universal Access Design Standards

To the extent that certain of the issues addressed in Chapter 7 also are addressed in the Waterways Regulations, the Chapter 7 requirements generally are more demanding. For example, with respect to the lot coverage calculation, the Waterways Regulations permit up to 25% of a lot area to be devoted to roadways and surface parking. This Municipal Harbor Plan prohibits surface parking facilities, and limits the lot area that may be devoted to roadways to 20%. Also, while the Waterways Regulations require compliance with the ADA requirements and guidelines, Section 7.7.2 of this Municipal Harbor Plan establishes detailed Universal Access Design Standards for projects designed to make the waterfront and watersheet accessible to people of all ages and abilities.

Chapter 7 also establishes requirements for which there is no counterpart in the Waterways Regulations, all of which will further enhance the public's rights in the tidelands, as well as their ability to exercise those rights. For example, Section 7.5 regarding open space and public space includes the requirement to incorporate cultural, historic and educational uses and programming into projects, as well as requirements to ensure that as new public spaces are designed and constructed, they are able to accommodate a variety of programming options, from the occasional festival to the space for quiet relaxation and reflection. Section 7.7.1 establishes detailed urban design guidelines many of which are geared toward enhancing the pedestrian experience by requiring, among other things, the preservation of existing view corridors, the creation of new view corridors and that building mass be divided vertically to establish a pedestrian-scale.

The provisions of this Municipal Harbor Plan meet or exceed the requirements of the Waterways Regulations in the extent to which they promote public use and enjoyment of the South Boston Waterfront to a degree that is fully commensurate with the public's rights in the tidelands, as provided in 310 CMR 9.53.

Inner Harbor Subdistrict Substitution Chart

	Waterways Regulations	Substitutions	Offsets
Fan Pier			
(a) Water-Dependent Use Zone	100 feet along the fan edge; 35 feet at the Cove edge; 35 feet along Parcel J. Total setback area approximately 147,422 square feet. See Figure 10-2.	140 feet at the fan edge; 50-65 feet along the Cove edge; 20 feet around Parcel J (the Civic Site). Total setback area approximately 174,208 square feet. See Figure 10-3.	Each decrease in depth of the setback on the Fan Pier is offset by a corresponding increase elsewhere on the site, thereby maintaining the same overall setback area.
(b) Height	55 feet along the water-dependent use zone to almost 300 feet at the corner of Old Northern Avenue and Courthouse Way. See Figure 10-2.	From the fan edge, after the 140 foot water-dependent use zone, heights step up from 175 feet, to 250 feet, to 275 feet, then to 300 feet at the corner of Old Northern Avenue and Courthouse Way. Height for Parcel J is 60 feet. For the two building parcels east of the Public Green, heights are 250 feet. See Figure 10-3	<p>Quantitative Offsets:</p> <ul style="list-style-type: none"> • <i>Additional Open Space (Required Offset).</i> • <i>Civic, Cultural, or Educational Facilities (Required Offset).</i> • <i>Four-Season Rooms (Required Offset):</i> Harbor Hall and Grand Hyatt Atrium • <i>Public Water-Related Facilities (Required Offset):</i> Fishing Pier. • <i>Upper Floor "Active" Facilities of Public Accommodation.</i> <p>Qualitative offsets:</p> <ul style="list-style-type: none"> • <i>Water Transportation Subsidy or Service.</i> • <i>Other Public Water-Related Facilities.</i>

	Waterways Regulations	Substitutions	Offsets
Pier 4			
(a) Water-Dependent Use Zone	100 feet along the end of the wharf; approximately 26 feet along the sides of the wharf. Total setback area of approximately 61,697 square feet. See Figure 10-2.	Minimum 200-foot setback along the seaward edge of the site; 18-30 feet along the sides of the wharf. Total setback area of 61,697 square feet. See Figure 10-3.	Each decrease in depth of the setback on the Fan Pier is offset by a corresponding increase elsewhere on the site, thereby maintaining the same overall setback area.
(b) Building Height	55 feet, starting at 100 foot depth to approximately 120 feet. See Figure 10-2.	200-foot no-build zone. Starting at 200 foot depth, first height zone is 100 feet high and is 430 feet long; the height zones step back to 200 feet, then 250 feet closest to Old Northern Avenue. Figure 10-3.	<p>Quantitative Offsets:</p> <ul style="list-style-type: none"> • <i>Additional Open Space</i> • <i>Civic, Cultural or Educational Facility (Required Offset).</i> • <i>Four-Season Room (Required Offset).</i> • <i>Upper Floor "Active" Facilities of Public Accommodation.</i> <p>Qualitative Offsets:</p> <ul style="list-style-type: none"> • <i>Water Transit Subsidy or Service.</i> • <i>Public Water-Related Facilities</i>
The Restaurant Parcels	Existing structures are 1-2 stories high and cover 80-90% of their lot area.	None	None

	Waterways Regulations	Substitutions	Offsets
McCourt/Broderick Parcels A and B (Note: Only portions of Parcels A and B lie within jurisdiction.)			
(a) Lot Coverage	Nonwater-dependent uses may not exceed a 50% lot coverage ratio.	More than 50% lot coverage ratio may be permitted in area in jurisdiction to achieve a better site plan for entirety of parcels; to be determined through the Article 80 review process.	To the extent that the build out of these parcels results in greater than 50% lot coverage in the portions of the parcels that are in jurisdiction, the amount of open space lost must be incorporated elsewhere in the ENF/PNF project site.
(b) Open Space	Lot area not included in building footprint must be open space for public recreation.	To the extent that the build out of these parcels results in greater than 50% lot coverage, there is a corresponding loss in the amount of open space for public recreation.	Additional open space incorporated into the project site on account of lot coverage ratio must be for public recreation.
(c) Height	For Parcel A, 105 feet to approximately 190 feet; for Parcel B, approximately 120 feet to 130 feet. See Figures 10-2, 10-4.	250 feet for both parcels, with a 75 foot street wall. See Figures 10-3, 10-5.	Quantitative Offsets: <ul style="list-style-type: none"> • <i>Civic, Cultural or Educational Facilities (Required Offset).</i> • <i>Upper Floor "Active" Facilities of Public Accommodation</i> Qualitative Offsets: <ul style="list-style-type: none"> • <i>Water Transit Subsidy or Service</i> • <i>Public Water-Related Facilities</i>

	Waterways Regulations	Substitutions	Offsets
McCourt/Broderick Parcel C (Note: Only a portion of Parcel C lies within jurisdiction.)			
(a) Lot Coverage	Nonwater-dependent uses may not exceed a 50% coverage ratio.	<p>More than 50% lot coverage ratio may be permitted in area in jurisdiction to achieve a better site plan for entirety of parcels; to be determined through the Article 80 review process.</p> <p>To the extent that the build out of this parcel results in greater than 50% lot coverage, there is a corresponding loss in the amount of open space for public recreation.</p> <p>250 feet. See Figure 10-3.</p>	<p>To the extent that the eventual build out of Parcel C results in a lot coverage ratio in excess of 50% on the portion of the parcel that is located in jurisdiction, the same amount of open space must be provided elsewhere in the project site.</p> <p>Additional open space incorporated into the project site on account of lot coverage ratio must be for public recreation.</p> <p>Quantitative Offsets:</p> <ul style="list-style-type: none"> • <i>Civic, Cultural or Educational Facility (Required Offset).</i> • <i>Four-Season Room.</i> • <i>Upper Floor "Active" Facilities of Public Accommodation.</i> <p>Qualitative Offsets:</p> <ul style="list-style-type: none"> • <i>Water Transit Subsidy or Service</i> • <i>Public Water-Related Facilities</i>
(b) Open Space	Lot area not included in building footprint must be open space for public recreation.		
(c) Height	55 feet to 130 feet. See Figure 10-2.		

	Waterways Regulations	Substitutions	Offsets
McCourt/Broderick Parcel D			
(a) Lot Coverage	Nonwater-dependent uses may not exceed a 50% coverage ratio.	More than 50% lot coverage ratio permitted in consultation with the BRA design review staff during the Article 80 review process. If the parcel is combined the Barking Crab site, no substitution applies.	Contribution to South Boston Waterfront Account of the Parks Fund proportionate to increase in lot coverage ratio.
(b) Open Space	Lot area not included in building footprint must be open space for public recreation.	To the extent that the build out of this parcel results in greater than 50% lot coverage, there is a corresponding loss in the amount of open space for public recreation. 75 feet. See Figure 10-6.	Contribution to the Parks Fund sufficient to design, construct, and maintain first class urban park space: <ul style="list-style-type: none"> • \$75 per square foot (one-time). • \$2 per square foot (annual). None required.
(c) Height	55 feet to approximately 90 feet. See Figure 10-5.		

Barking Crab Parcel	Waterways Regulations	Substitutions	Offsets
(a) Water-Dependent Use Zone	25 feet from existing pier edge. Total setback area of 5,000 feet.	0, provided the first floor of any new structure incorporates a 12-foot wide Harborwalk.	
(b) Lot Coverage and Open Space	New structures for nonwater-dependent uses limited to 50% lot coverage ratio.	More than 50% lot coverage ratio and proportionate reduction in open space for public recreation permitted in consultation with the BRA design review staff during the Article 80 review process. If the parcel is combined with Parcel D, no substitution applies.	<ul style="list-style-type: none"> • <i>Rooftop Viewing Area and Four-Season Room.</i> • <i>Upper Floor "Active" Public Facilities of Accommodation.</i> • <i>Water Transit Subsidy or Service.</i> • <i>Public Water-Related Facilities.</i>
(c) Facilities of Private Tenancy	Prohibit facilities of private tenancy on pile-supported structures.	Permit facilities of private tenancy on pile-supported structures.	
(d) Height	55 feet. See Figure 10-5.	75 feet. See Figure 10-6.	

11.0 FORT POINT HISTORIC SUBDISTRICT

The Fort Point Historic Subdistrict is bounded by new Northern Avenue to the north, West Service Road and the Massport Haul Road to the east, the Fort Point Industrial District to the south and Fort Point Channel to the west. It contains approximately 74.1 acres of land, approximately 39% of which is subject to Chapter 91 jurisdiction. See Figure 11-1. The area contains late nineteenth and early twentieth century ornamental brick warehouses owned by the Boston Wharf Company and large tracks of vacant land in the southern portion of the subdistrict. Much of the vacant land currently is used for staging by the Central Artery/Tunnel Project.

The Fort Point Historic Subdistrict includes 2230 linear feet of waterfront along Fort Point Channel. The area's former warehouses are now home to an eclectic mix of uses, including office, light industrial and residential uses. Current commercial occupants include financial services companies, architects, engineers and graphic designers and computer software and internet development companies. Another important use in this area is artists' live/work space which embraces a strong arts community that brings character to the area. The Children's Museum and the nearby Boston Tea Party Ship, located directly on the Channel, have established the area as a visitor destination. In addition to other mitigation commitments in and along Fort Point Channel, the Central Artery/Tunnel Project will construct portions of Harborwalk along the Channel.

Fort Point Channel has the potential to be an exciting new civic area for the City. New educational and cultural uses will complement existing public attractions, such as the Children's Museum and the Tea Party Ship. The sheltered waters of the Channel provide a wonderful opportunity to bring people out onto the water with new floating public uses and public boat rentals. New development on both sides of the Channel will create a density of population to activate use on and at the water's edge, and must draw people to the Channel's edge and encourage them to take advantage of a variety of active and passive recreational opportunities.

This chapter is organized much like the Inner Harbor Sudistrict chapter (Chapter 10). The first section is a review of the planning objectives of the Public Realm Plan as they apply to this subdistrict. The next sections establish development guidelines, substitutions and offsets, first for the northern portion of the subdistrict, which will involve primarily infill development, then for the large vacant parcels in the southern portion of the subdistrict.

11.1 PLANNING OBJECTIVES FOR THE FORT POINT HISTORIC SUBDISTRICT

The Public Realm Plan seeks to promote the Fort Point Historic Subdistrict's existing broad mix of uses, while focusing on increasing the presence of the residential uses in order to develop further the subdistrict's identity as a distinct neighborhood. The area's historic warehouse structures are attractive for redevelopment into residences, and will

enhance the subdistrict's existing strong but small residential community. In addition, to promote public access to both the Fort Point waterfront and the nonwaterfront areas of this historic subdistrict, retail and commercial, cultural and other public uses are encouraged for the lower floors of existing and new structures. To support the convention center and the City's thriving visitor economy, new hotels also are encouraged. The area's waterfront parcels will have an important role in supporting activation of Fort Point Channel. The following describes the five primary planning principles of the Public Realm Plan in relation to the Fort Point Historic Subdistrict.

- **Promote Access to Boston Harbor as a Shared Natural Resource**

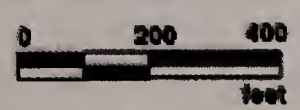
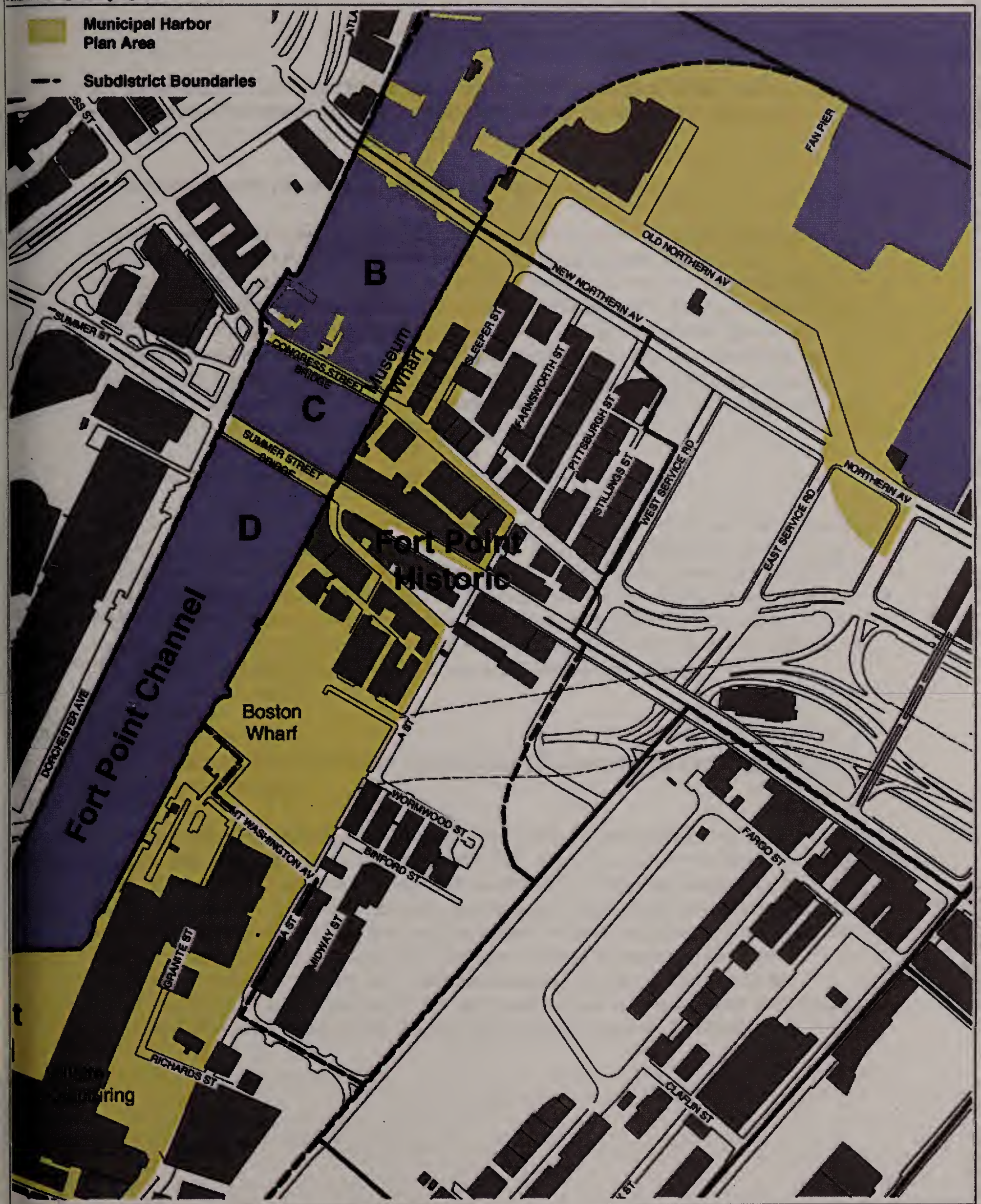
Fort Point Channel can become a great civic space for the City of Boston. Each of the areas that border the Channel will play an important role in drawing people to the waterfront and onto the water sheet. In the Fort Point Historic Subdistrict, the Children's Museum has embarked on an ambitious redesign of its wharf area and adjacent water sheet for public education and recreational programs, using Fort Point Channel itself as a learning resource. The MBTA's Mitigation Park will be on an adjacent parcel. A completed Harborwalk, together with the incorporation of the ground floors of adjacent buildings to create a waterfront promenade lined with public uses, will draw people to the Channel and into the subdistrict. The Public Realm Plan includes a new pedestrian bridge that will connect Dorchester Avenue to the Fort Point Historic Subdistrict. The Plan also proposed that the new bridge connect to a new park akin to Commonwealth Mall that would span from Fort Point Channel to the convention center through the heart of the Fort Point Historic Subdistrict, providing an open space resource to the neighborhood.

- **Preserve and Enhance the Industrial Port**

The Fort Point Historic Subdistrict is adjacent to the Fort Point Industrial Subdistrict, home to Gillette and other industrial users. Although not part of the industrial port area, the Fort Point Industrial Subdistrict plays an important role in Boston's economy. Like the industrial port, the Fort Point Industrial Subdistrict depends upon good truck access to and from the City's highway system. To minimize conflict with nearby industrial users, southern portions of the subdistrict must be planned carefully to provide an appropriate transitional buffer between industrial users and the mixed-use neighborhood.

- **Plan the District as a Vital, Mixed-Use Neighborhood**

Like the Inner Harbor Subdistrict, a broad mix of uses is planned for the Fort Point Historic Subdistrict. The built or northern portion of the Fort Point Historic Subdistrict, with its concentration of historic structures, closely-spaced, already contains the pedestrian scale that must be created in the build-out of the southern portion of the subdistrict. Retail and other commercial uses are planned for the lower floors of existing structures; with residential uses to be encouraged for the upper floors. Infill development should include hotel uses to support the convention center and visitor economy, office uses to help satisfy the City's unmet demand, and retail and other uses for the ground floors that will attract



**FIGURE 11 - 1. FORT POINT HISTORIC
SUBDISTRICT
Municipal Harbor Plan Area**

pedestrian traffic. The Public Realm Plan, however, identifies the southern portion of this subdistrict as a “residential” mixed-use area, emphasizing the residential component planned for this portion of the subdistrict.

- **Develop the District as an Integral Part of Boston’s Economy**

As with other South Boston Waterfront subdistricts, the extent to which physical and economic links can be developed between the different subdistricts, and between subdistricts and other City neighborhoods, will determine the extent to which the South Boston Waterfront District will become an integral part of Boston’s economy. Pedestrian links from the Channel’s bridges to and through the Fort Point Historic Subdistrict will complement land and water transportation links to be located at the Courthouse, the Fan Pier, the World Trade Center and the convention center. The mix of uses planned for the Inner Harbor and Fort Point Historic Subdistricts will support and draw from each other, as well as from the Financial District and other adjacent areas.

- **Enhance the South Boston Community**

The Fort Point Historic Subdistrict is in a position to create another important link between the South Boston neighborhood and the waterfront. The Public Realm Plan identifies New Wormwood Street (West Service Road) as a new major north-south connector that will draw people through the Fort Point Historic Subdistrict all the way to the Fan Pier Cove. Summer Street and new east-west connections also will draw people to the Channel waterfront, and to new public uses along its edges and on the Channel itself. In addition, new commercial development in the subdistrict will generate housing and jobs linkage funds for the community.

11.2 FORT POINT HISTORIC SUBDISTRICT NORTH: DEVELOPMENT GUIDELINES

Fort Point Historic Subdistrict North refers to that portion of the subdistrict located between new Northern Avenue and Summer Street. The predominant building form is late nineteenth and early twentieth century brick warehouse structures that range from 75 to 125 feet in height. A portion of this area, encompassing 98 industrial, commercial and civic buildings and five bridges, has been determined eligible for listing on the National Register of Historic Places. These structures have a certain massiveness and density. Much of the Fort Point Historic waterfront could not be constructed today under the Waterways Regulations. Nonetheless, the subdistrict has an important identity that should be maintained and reflected in new development projects. There are few likely

development sites in this portion of the subdistrict.¹ As with the Inner Harbor Subdistrict, implementing the Public Realm Plan will require substitutions from the Waterways Regulations.

11.2.1 Lot Coverage and Open Space

The existing historic neighborhood is very dense, with building faces meeting the sidewalk on all four sides of the building. The massive wharf buildings that line the streets of this area are very tangible evidence of Boston's proud maritime past. The way that these buildings are built right at the water's edge also is one of the defining features of Fort Point Channel. Maintaining the feel of the historic urban fabric in this neighborhood is of paramount importance. The lot coverage limit under the Waterways Regulations of 50% is not in keeping with the existing historic fabric. Also, the infill parcels are all relatively small. The largest is only 12,700 square feet in size. Without a lot coverage substitution, none of these parcels is likely to be developed.

Fort Point Channel is envisioned as a highly active body of water, with water transit uses, public landings, water taxi docks, and a variety of other public uses. There is existing access to the water and the watersheet at Children's Wharf/MBTA Park and will be access to the waterfront in the southern portion of the subdistrict when the CA/T Project completes Harborwalk. Given the variety of opportunities now or in the future to be available throughout the South Boston Waterfront for public access and water-dependent uses, we believe that what these few sites can add, individually, in terms of open space is far outweighed by the value of maintaining the historic integrity of this subdistrict. What these few sites can add in aggregated open space, however, is considerably more significant.

Given the density of the existing neighborhood, and the lack of public open space, it is important to offset negative impacts of the substitute lot coverage ratio with an in-kind quantitative offset of the same numerical requirement. Given that each of these parcels is under separate ownership, it is not possible to aggregate the open space requirements for all of the parcels at a single site. We can, however, aggregate these open space requirements in another manner that will produce similar results. For infill development parcels in Fort Point Historic Subdistrict North, we will permit buildings to exceed the 50% lot coverage ratio. For every square foot over the 50% ratio (within Chapter 91 jurisdiction), the property owner will be required to contribute a dollar amount to the City of Boston's Fund for Parks and Recreation in Boston (the Parks Fund).

¹ The building located at 303 Congress Street collapsed several years ago. The property owners have received a Chapter 91 license to reconstruct the building in more or less the same configuration, which is consistent with other historic structures in the area and on the Channel. The building, which will sit directly on the seawall, will be 87 feet high, have a lot coverage of 80% and include a 12-foot wide interior Harborwalk. Because this structure is already permitted, no substitutions are required.

The Parks Fund is a trust established in 1983 for the purpose of “furthering the maintenance and preservation of parks now or in the future belonging to the city of Boston and providing recreational facilities and programs to the residents of Boston”. A copy of the trust document is contained in Appendix 5. The terms of the trust document permit us to attach special restrictions to funds contributed to the trust. In this way, we can specify that funds generated by property owners taking advantage of this lot coverage substitution will be used in a specific geographic area, such as the South Boston Waterfront. We will also specify that any new park space must either be in Chapter 91 jurisdiction, or have a relationship to other open space parcels in Chapter 91 jurisdiction.

The Parks Fund is an appropriate vehicle to receive contributions by developers because it has the purpose and the power to provide for and maintain open space. By creating an account dedicated to funding a new park in the South Boston Waterfront, we can aggregate the contributions of all property owners seeking to take advantage of this substitution. This will permit us to fund a more significant park space for area residents than the small pocket parks that would arise from application of the 50% lot coverage ratio. This lot coverage ratio and offset also is more likely actually to result in new public open space, given the infeasibility of infill development without this substitute provision.

Because the Fort Point waterfront, like the rest of the South Boston Waterfront, is located on Commonwealth tidelands, those areas not located in a building footprint are required to be public open space for active or passive recreation. Thus each lot coverage substitution carries a corresponding substitution for the provision regarding public open space for recreation. The offset developed for this substitution is taken into account in the amount that we determined was an appropriate contribution.

We have reviewed with the City’s Parks and Recreation Department the build-out costs of recent urban park areas. Based on this information, we have determined that an appropriate amount for the design and construction of high quality urban park areas is \$75 per square foot. Accordingly, for property owners seeking to take advantage of this lot coverage substitution, for every square foot their project exceeds 50% lot coverage, \$75 must be contributed to the South Boston Waterfront Account in the Parks Fund.

In addition, we have included an amount earmarked toward the long-term maintenance of park space. This amount will be an annual payment of \$2 per square foot for every square foot that a project exceeds 50% lot coverage. Both the long-term maintenance and design and construction figures are based on year 2000 dollars. These amounts will increase with increases in the Consumer Price Index.

By taking advantage of the City’s existing Parks Fund and requiring contributions from property owners in exchange for lot coverage and open space substitutions, we can provide area residents and visitors with more significant, high quality park space in the neighborhood. New infill structures also must be consistent with the existing building line and the definition of the surrounding sidewalk. In order to take advantage of these substitute provisions, new infill structures must meet these specific design criteria as well.

11.2.2 Building Height

The primary purpose of height substitutions in Fort Point Historic Subdistrict North also is to maintain the historic building fabric of the area. Heights of existing historic wharf structures range from 75 to 125 feet. Because none of the vacant lots in this area is located directly on the waterfront, very little is required in the way of a height substitution in order for new structures to emulate the urban form that already exists in this area. New infill buildings also should be compatible with the density, scale, materials, colors, façade treatments and the relationship of buildings to the street's edge and the water's edge, and contribute to the quality of the historic subdistrict.

A height substitution is included only for Parcel E on Sleeper Street, which is located adjacent to the MBTA Park and the Children's Museum. For other vacant parcels in this subdistrict, the Chapter 91 heights are either consistent with or in excess of the heights of surrounding structures. Accordingly, no height substitutions are included for these parcels.

11.2.3 The Water-Dependent Use Zone at Children's Wharf and MBTA Park

The water-dependent use zone under the Waterways Regulations along Fort Point Channel between new Northern Avenue and Congress Street is shown in Figure 10-6. Along the Children's Museum, the regulatory water-dependent use zone is 45 feet. The Children's Museum is setback from the edge of Fort Point Channel approximately 123 feet. As shown in Figure 10-7, this Municipal Harbor Plan maintains the regulatory setback along the Children's Museum building to provide the museum with flexibility to expand. However, this flexibility is available only to the Children's Museum, or other public cultural facility that may be located on this site. The no build zone otherwise is established at 123 feet – up to the building face of the existing structure.

North of the Children's Museum is an area to be built out as a park by the MBTA as mitigation for transitway construction. Along this portion of wharf, the regulatory water-dependent use zone ranges from 28 feet to 60 feet. This space along the Channel is an important public waterfront resource, and its importance will increase with the completion of MBTA Park. East of MBTA Park is Parcel E, one of the McCourt/Broderick Parcels. As shown in Figure 10-7, this Municipal Harbor Plan designates the MBTA Park area as a no build zone.

In Chapter 7 of this Municipal Harbor Plan, *Open Space and Public Space Baseline Requirements and Guidelines*, we note that, in some instances, structures located within a water-dependent use zone can help to support and foster water-dependent uses, especially public access. The Children's Wharf/MBTA Park area is one of the waterfront areas particularly suited to benefit from these types of uses and structures. The water-dependent use zone at this site already includes the Milk Bottle, a small structure that sells food and soft drinks in the warmer months. Other small structures designed to shelter pedestrians from the wind or sun or while they wait for water transit, or which provide small watercraft

or fishing rentals, sell ferry tickets or snacks, or are a part of the Children's Museum, may be appropriate. The final determination with respect to what, if any, of these types of public use structures are appropriate for the Children's Wharf/MBTA Park area is left to the Article 80 project review process.

11.3 FORT POINT HISTORIC SUBDISTRICT NORTH: SUBSTITUTIONS AND OFFSETS

Substitutions: Lot Coverage, Open Space, Building Height

At this time, not including 303 Congress Street, there are only two full parcels located within Chapter 91 jurisdiction available for infill development in this area, Parcel E on Sleeper Street, and 321-323 Congress Street. See Figure 11-2. In addition, three other parcels located on Sleeper Street, portions of which are located within jurisdiction, are available for infill development: Parcel F, 33 Sleeper Street and 11-13 Sleeper Street. See Figure 10-6. The substitutions and offsets included for Fort Point Historic Subdistrict North are designed to provide viable redevelopment options for these parcels that also protect both the historic resource that is this unique neighborhood and the public's rights in tidelands.

Parcel E is located directly north of the Children's Museum and adjacent to the parcel on Fort Point Channel that will become the MBTA's Mitigation Park. Parcel E contains approximately 8095 square feet of lot area. 321-323 Congress Street, located two buildings from Fort Point Channel, contains approximately 12,705 square feet of land area.

Parcel F, 33 Sleeper Street and 11-13 Sleeper Street are not located on the waterfront. Parcel F is a small segment of a much larger development parcel. The full development parcel contains approximately 74,900 square feet of land area, of which approximately 4639 square feet are in Chapter 91 jurisdiction. 33 Sleeper Street contains approximately 34,900 square feet of land area, of which approximately 7321 square feet are in jurisdiction. 11-13 Sleeper Street contains approximately 9300 square feet of land area, of which approximately 6362 square feet are in jurisdiction.

11.3.1 Lot Coverage and Open Space 310 CMR 9.51(3)(d)/310 CMR 9.53(2)(b)

The northern portion of this subdistrict is one of the few areas of the South Boston Waterfront for which we believe that an increase in the lot coverage percentage is appropriate. In the southern, unbuilt portion of this subdistrict, and in the vast majority of the sites in the Inner Harbor, the 50% requirement is maintained.

Fort Point Historic North Subdistrict Lot Coverage Substitution. The Waterways Regulation limit the lot coverage ratio of new structures for nonwater-dependent uses to 50%. For all infill parcels in Fort Point Historic Subdistrict North, lot coverage ratios greater than 50% will be permitted. No specific alternate lot coverage ratio is established. Property owners will be permitted the flexibility to establish an appropriate lot coverage

ratio for the specific building parcel in consultation with the BRA during the Article 80 review process.

Fort Point Historic North Subdistrict Lot Coverage Substitution Analysis. The Waterways Regulations require that, with respect to private as well as Commonwealth tidelands, structures for nonwater-dependent uses not exceed a 50% lot coverage ratio. Lot area used for water-dependent purposes is not subject to the 50% limitation. The DEP shall waive this numerical standard if the project conforms to an approved Municipal Harbor Plan which specifies alternative site coverage ratios and other requirements which ensure that, in general, buildings for nonwater-dependent purposes will be relatively condensed in footprint, in order that an amount of open space commensurate with that occupied by such buildings will be available to accommodate water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(d).

Parcel E. Parcel E is located directly north of the Children's Museum and adjacent to the parcel on Fort Point Channel that will become the MBTA's Mitigation Park. Parcel E contains approximately 8095 square feet of lot area. Applying a lot coverage ratio of 50% would provide approximately 4048 square feet (less than 1/10 of an acre) of open space for active and/or passive public recreation. Given the small size of the parcel, it is also unlikely that redevelopment will occur without a substitution for the regulatory provision. In addition, from an urban design perspective, if any development were to occur on this site, the appropriate massing should reflect the adjacent Museum Wharf building.

Directly in front of Parcel E, on Sleeper Street, is a small parcel (approximately 5968 square feet) owned by the City of Boston. The City parcel is not a separate development parcel, but could be combined with Parcel E to form a slightly larger development parcel of approximately 14063 square feet. The lot coverage and open space substitutions and offsets included for Parcel E also apply to the City parcel.

321-323 Congress Street. This parcel, which contains approximately 12,705 square feet of land area, is not located on the waterfront. The 50% lot coverage ratio of the Waterways Regulations would yield approximately 6,353 square feet of public open space at this location. As with other infill parcels in Fort Point, because of the small size of the parcel, redevelopment is less feasible without a lot coverage substitution.

Sliver Parcels: Parcel F, 33 Sleeper Street and 11-13 Sleeper Street. None of these sliver parcels are located on the waterfront. Parcel F contains approximately 4639 square feet of land area in Chapter 91 jurisdiction. The 50% lot coverage ratio of the Waterways Regulations would provide approximately 2320 square feet of public open space at this location. 33 Sleeper Street contains approximately 7321 square feet of land area in jurisdiction. The 50% lot coverage ratio of the Waterways Regulations would provide approximately 3661 square feet of public open space at this location. 11-13 Sleeper Street contains approximately 6362 square feet of land area in jurisdiction. The 50% lot coverage ratio of the Waterways Regulations would provide approximately 3181 square feet of public open space at this location.

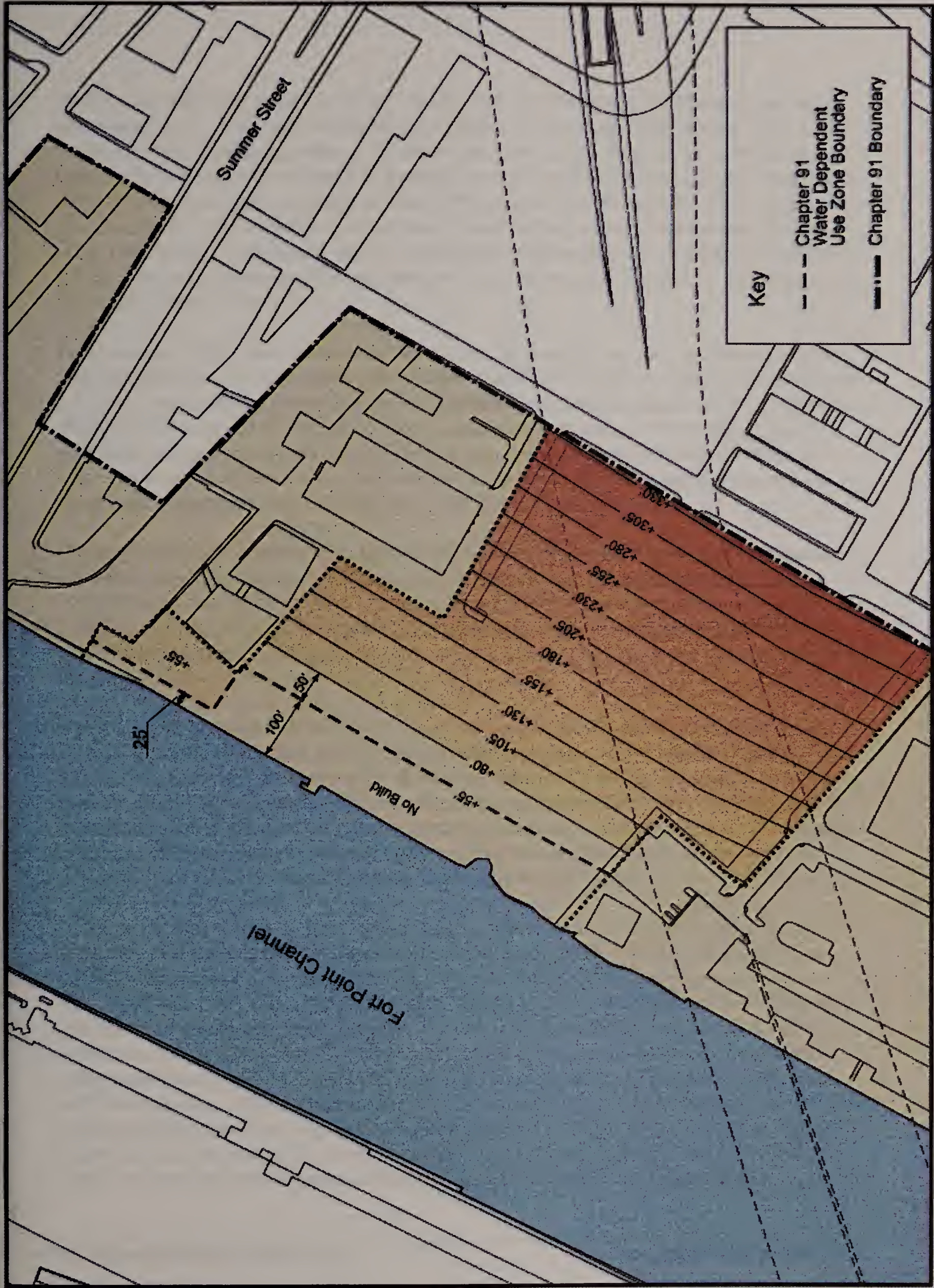


Figure 11-2 Wormwood Area Chapter 91 Heights and Water Dependent Use Zone

None of the infill parcels is very large – the largest, 321-323 Congress Street, is just over one-quarter acre. There are two direct consequences to the small sizes of these lots. First, redevelopment is unlikely without a lot coverage substitution. Second, new structures necessarily will remain condensed in footprint, even if the lot coverage ratio is increased to 85%, as with 303 Congress Street, or even 90%. Application of an 85% lot coverage ratio would result in 9162 square feet less of open space in this portion of the subdistrict. To offset this impact, as discussed, we are creating a new account within the Parks Fund that will be devoted to the acquisition and long-term maintenance of new public park space in the South Boston Waterfront.

Because none of the parcels is located directly on the water, open space on the parcels is most useful for public access rather than other water-dependent uses. Although Parcel E is adjacent to what will be a new Channel-front public park, and the regulatory open space at this location could add to this public space, additional open space at this location is not necessarily needed, and application of the regulatory requirement to Parcel E creates an unbuildable lot. Public access to the area will be better served by aggregating these open space requirements through contributions to the Parks Fund.

Offsets for Impacts of Fort Point Historic Subdistrict North Lot Coverage Substitution.

Given the density of the existing neighborhood, and the lack of public open space, it is important to offset negative impacts of the substitute lot coverage ratio with an in-kind quantitative offset of the same numerical requirement. For every square foot over the 50% ratio (within Chapter 91 jurisdiction), the property owner will be required to contribute to the Parks Fund.

By creating an account dedicated to funding a new park in the South Boston Waterfront, we can aggregate the contributions of all property owners seeking to take advantage of this substitution. This will permit us to fund a more significant park space for area residents than the small pocket parks that would arise from application of the 50% lot coverage ratio and increase the likelihood that development of these parcels will occur. This lot coverage ratio and offset also is more likely actually to result in new public open space, given the infeasibility of infill development without this substitute provision.

This lot coverage substitution and corresponding offset meet the regulatory standard for approval. The flexible lot coverage substitution developed for infill development in this district will continue to ensure that buildings for nonwater-dependent purposes will be relatively condensed in footprint, while also helping to create the necessary conditions for redevelopment to be feasible in the area. By permitting, in effect, an aggregation of the open space requirement, the offsetting measure will provide residents and visitors with a more significant public open space than the regulatory provision. Thus, the substitution and corresponding offset together ensure that an amount of open space commensurate with that occupied by nonwater-dependent buildings will be available to accommodate water-dependent activity and public access, as appropriate for the Fort Point Historic Subdistrict North, with comparable or greater effectiveness than the Waterways Regulations.

Fort Point Historic Subdistrict North Open Space Substitution and Offset. To the extent that the eventual build-out of infill parcels in the Fort Point Historic North Subdistrict take advantage of the lot coverage substitution and result in less open space in the MHP Area, there will be a proportionate reduction in exterior open spaces for active or passive recreation. The substitute provision for this requirement is to permit infill parcels to provide less space for public recreation facilities than required under the Waterways Regulations, provided that this substitute provision may be used only in connection with the lot coverage substitution. The lot coverage substitution is offset with a contribution to the Parks Fund. This open space substitution is offset with the requirement that the contribution be sufficient, on a square footage basis, to design, construct and maintain first class urban park space. As discussed in Sections 8.9 and 11.2.1, the offset for this substitution is a one-time payment of \$75 per square foot plus an annual payment equal to \$2 per square foot to The South Boston Waterfront Account of the Parks Fund.

Fort Point Historic Subdistrict North Open Space Substitution Analysis. For nonwater-dependent use projects located on Commonwealth tidelands, that portion of the site not located in the building footprint must include exterior open spaces for active or passive public recreation, such as parks, plazas and observation areas. The amount of such space shall be at least equal to the square footage of all Commonwealth tidelands on the project site landward of the project shoreline and not within the footprint of any buildings, less any space deemed necessary by the DEP to accommodate other water-dependent uses. The DEP shall waive this requirement if the project conforms to an approved Municipal Harbor Plan that specifies alternative requirements for public outdoor recreation facilities that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. 310 CMR 9.53(2)(b).

The Waterways Regulations permit us to specify alternative requirements for public outdoor recreation facilities that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. The requirement to contribute to the Parks Fund allows us to aggregate the open space requirements of several parcels, in order to obtain a more significant park area. The requirement that the amount of that contribution be sufficient to build out first class urban park space ensures that we will obtain high quality open space suitable for active or passive recreation. The combination of the lot coverage substitution and the open space substitution together with their corresponding offsets meet the regulatory standard for approval.

11.3.2 Building Height - 310 CMR 9.51(3)(e) (Parcel E on Sleeper Street Only)

A height substitution is included only for Parcel E on Sleeper Street. With respect to other existing infill parcels in Fort Point Historic Subdistrict North, the regulatory heights are either consistent with or in excess of heights of the historic wharf structures. Accordingly, there are no height substitutions for Parcel F, 33 Sleeper Street, 11-13 Sleeper Street or 321-323 Congress Street.

Parcel E on Sleeper Street Height Substitution. Chapter 91 heights for Fort Point Historic Subdistrict North are shown in Figure 10-6. For Parcel E, Chapter 91 heights range from 55 feet to approximately 85 feet. Parcel E is immediately adjacent to the Children's Museum, which is approximately 75 feet high. It will be important for any structure built on this site to match the height and form of the Children's Museum. Accordingly, this Municipal Harbor Plan provides for a height substitution of 75 feet for this site. This height substitution is shown in Figure 10-7.

Parcel E on Sleeper Street Height Substitution Analysis. A Municipal Harbor Plan may specify alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith, as appropriate for the harbor in question.

Massing Analysis. The height substitution for this site creates an alternative height that is in keeping both with the historic context and with the permitted heights for the parcel. The wind and shadow analyses, below, indicate little in the way of impacts on account of the substitute height. In fact, application of the height substitution actually mandates heights lower than Chapter 91 heights for a portion of the parcel. This substitute provision simply levels off the permitted height for Parcel E at a height that is both within the range permitted under Chapter 91 and consistent with the historic context.

Wind Analysis. The wind analysis for this parcel indicates that there will be no change in the pedestrian level winds from the Chapter 91 build-out to the MHP build-out either between Museum Wharf and Mitigation Park (Location 5) or in front of Mitigation Park (Location 6).

For northwest winds, the pedestrian level winds are either Category 1 (Comfortable for Long Periods of Standing or Sitting) or Category 2 (Comfortable for Short Periods of Standing and Sitting). There is no change in the pedestrian level winds for no build, Chapter 91 build or MHP build conditions.

For southwest winds, at these two locations, the pedestrian level winds are Category 3 (Comfortable for Walking), and there is no change for no build, Chapter 91 build or MHP build conditions.

For northeast winds, the pedestrian level winds also are either Category 2 or Category 3, and there is no change for no build, Chapter 91 build or MHP build conditions.

For easterly winds, the pedestrian level winds are either Category 1 (Location 5) or Category 2 (Location 6). For Chapter 91 build and MHP build conditions, pedestrian level winds improve at both locations over the no build condition: Location 5 drops from Category 2 to Category 1; and Location 6 drops from Category 3 to Category 2.

For southeast winds, for the no build condition, pedestrian level winds are Category 1 at Location 5, and Category 2 at Location 6 for no build, Chapter 91 build and MHP build conditions.

Both the Chapter 91 and the MHP build conditions actually result in a minor improvement in pedestrian level winds over the no build condition. As the wind analysis for this area (Locations 5 and 6) demonstrates, however, there is no increase in pedestrian level winds from the Chapter 91 build condition to the MHP build condition.

Shadow Analysis. As shown in Figure 8-10, along Fort Point Channel, at 9:00 a.m., much of the Harborwalk and immediately adjacent watersheet are in shadow, as well as a portion of the MBTA Park. By 10:00 a.m., the watersheet is largely free from shadow impacts. From 11:00 a.m. on, the watersheet and Harborwalk are largely free from any shadow impacts. By noon, the majority of the MBTA Park also is in sunlight. For the remainder of the day, as the sun continues to move through the site, the vast majority of the shadows cast are on existing buildings.

As shown in Figure 8-12, the net new shadow studies show little in the way of shadow impacts from the MHP build scenario. In the early morning, small amounts of additional shadow are cast in the watersheet. As the sun moves through the site, small amounts of additional shadow are cast on the Harborwalk. The MBTA Park remains almost completely free from net new shadow attributable to Parcel E. By mid to late afternoon, all net new shadow impacts are to the north of the site, then behind the building. Because of the small size of the structure in the MHP build scenario, and the minimal height substitution, the net new shadow has little impact on the pedestrian-level environment.

Offsets for Impacts of Parcel E on Sleeper Street Height Substitution. In many of the large development sites, the substitute provisions provide a great deal of flexibility to the property owner with respect to the massing and design of their sites, and changes in massing and design can result in changes in wind and shadow impacts. While the MHP build condition is useful for estimating impacts, it is not until the actual massing is tested that we know the actual level of impact, and can finalize the level of offset. With smaller sites such as Parcel E, there is much less flexibility with respect to massing. Accordingly, it is more likely that our estimate of the shadow impacts on the site will more closely approximate actual impacts.

Determining the appropriate level of offsets for Parcel E is necessarily a qualitative determination. Given the small size of the site, it is not possible to offset impacts with in-kind offsets without defeating the purpose of the substitution, which is to permit a height for the new structure that will be consistent with the adjacent Children's Museum. Also, similar to the Barking Crab site, the size and configuration of Parcel E do not lend themselves to the application of performance standards as a mechanism for evaluating the appropriate level of offset. Application of the performance standards require a level of flexibility that small sites inherently lack.

As demonstrated above, the MHP build condition at Parcel E will have little negative impact on the pedestrian-level environment. The size and configuration of the site also limit the level of offset that redevelopment can support. The menu of offsets below were carefully chosen to offset the negative shadow impact in a manner that will provide people with additional options, such as interior public spaces (the four-season room), or rooftop viewing areas which may be partially inside and partially outside, or ways to get out onto the water. The level of impact is not high, and the level of offset must be proportionate to the level of impact. The appropriate offset will be determined during the Article 80 and Chapter 91 licensing processes.

Rooftop Viewing Area and Four-Season Room. Parcel E is another good location for either a combination rooftop viewing area and four-season room, or a ground level four-season room. Given the limited negative impact of the height substitution, such a facility need not occupy the entire ground floor or roof, as the case may be. The appropriate size will be left to the Article 80 and Chapter 91 review processes.

Civic, Cultural or Educational Facility. A civic, cultural or educational facility can be used to offset impacts of the site's height substitution.

Water Transit Subsidy or Service. A water transportation subsidy or service also can be used to offset impacts of the site's height substitution.

Public Water-Related Facilities. Additional public water-related facilities in excess of the Chapter 91 requirements for the site also can be used to offset impacts of the site's height substitution.

As demonstrated above, this substitute provision, combined with the offsetting measures, will ensure that, redevelopment of Parcel E for nonwater-dependent use will result in a structure that is relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith, as appropriate for the harbor in question, with comparable or greater effectiveness than the Waterways Regulations.

11.4 FORT POINT HISTORIC SUBDISTRICT SOUTH: DEVELOPMENT GUIDELINES

The portion of the Fort Point Historic District located south of Summer Street is comprised of existing historic wharf structures and a large tract of vacant land, all of which was recently has been purchased by The Gillette Company from the Boston Wharf Company. The vacant tract, which spans from Fort Point Channel to the site of the convention center, is comprised of approximately 11.3 acres, all of which is located within Chapter 91 jurisdiction.

A small parcel located adjacent to the vacant land and Fort Point Channel, 60 Necco Court, is shown in Figure 11-2. 60 Necco Court contains approximately 11,500 square feet of land area, all of which is located within Chapter 91 jurisdiction. This parcel is addressed separately with respect to substitute provisions in Section 11.6.

11.4.1 Residential Uses in the Wormwood Area

The City of Boston is experiencing a critical housing shortage. One of the City's strategies for addressing this issue is to ensure that the build-out of the South Boston Waterfront includes a significant residential component. Accordingly, the Public Realm Plan calls for 40% of the total square footage of the South Boston Waterfront available for development to be developed for residential uses. The goal is to build a total of approximately 4000 units of housing over the next ten years. The Fort Point Channel and D Street areas are identified as residential focal points. The Public Realm Plan envisions Fort Point Historic Subdistrict South as the new, mixed-use *residential* neighborhood of Wormwood.

The Gillette Company, which recently purchased the vacant land from Boston Wharf Company, is a water-dependent industrial user whose plant is located in the adjacent Fort Point Industrial Subdistrict. While we recognize the importance of supporting the area's water-dependent industrial users, including protecting truck access to the industry, we also recognize the importance of ensuring an adequate housing supply for our citizens. Accordingly, although the primary planning focus of this area is the development of new housing and a new neighborhood, The Gillette Company may in the future need to expand its water-dependent industrial operations onto adjacent parcels. If this should be the case, we have invited Gillette and other major property owners to work with the City in a partnership to ensure that adequate parcels in the Fort Point area are secured for residential development in order to attain the City's goal to create a strong residential neighborhood. We already have begun to work with The Gillette Company to define appropriate design and management measures to ensure the compatibility of industrial and residential uses in close proximity to each other. We also have begun discussion with The Gillette Company to address truck access and transportation planning issues as they relate to maintaining adequate truck access to the Gillette facility.

In approximately June 2000, several properties in the Fort Point Historic Subdistrict South changed ownership and different property owners are developing strategies for their properties. The BRA has engaged with the major property owners and representatives of the Fort Point Channel artists and residential communities in a planning process to determine how the City's planning objectives for the area and the objectives of the businesses and residents can be compatible and mutually supportive. The objective of this process is to define a more detailed plan using the Public Realm Plan as the conceptual base. While this Municipal Harbor Plan identifies substitutions that we believe are appropriate for this area, we may in the future seek approval from EOEA to adjust these substitutions in order to achieve a more well-defined plan.

11.4.2 Open Space

New public streets must be incorporated into the development of the vacant tract and are essential to the development of a true neighborhood. They will divide the massive parcels into more manageable, pedestrian-scale blocks and provide necessary vehicular access to the site and the water. East-west streets will create view corridors between the convention center and the Channel, helping to tie the convention center to the Channel and the Financial District beyond. Once completed, public streets will have a dual role in this subdistrict. Streets throughout this area should be designed to be pedestrian – friendly. When weather and level of use warrant, these streets must be capable of being converted to pedestrian-only use. By limiting vehicular access at appropriate times of the day and year, we encourage public use and enjoyment of the water and waterfront.

This Municipal Harbor Plan maintains the 50% limit on lot coverage for the vacant tract in Fort Point Historic Subdistrict South. Although there is no lot coverage substitution, the actual configuration of open space in this area is critical. As shown in Figure 4-2, the Public Realm Plan identified an open space configuration that would create a 3.5-acre greenway connecting the Fort Point Channel to the convention center, approximately 1.25 acres of which is located within Chapter 91 jurisdiction. This Municipal Harbor Plan requires that this general concept be maintained by any future development in the area. See Figure 8-2. The actual alignment of this space would be determined through the development and design review process. Any alignment, however, must maintain a connection between the convention center and Fort Point Channel.

11.4.3 Ground Floor Facilities of Public Accommodation

A high level of activation is planned for Fort Point Channel. The Public Realm Plan envisions the Channel becoming “the next great place in the City”. Bridge crossings, streets and promenades along its edges, boating activity, water transportation and public uses and piers in appropriate locations within the Channel, will create a dynamic setting for a variety of uses on the land that surrounds Fort Point Channel. For structures located on Commonwealth tidelands containing nonwater-dependent uses, the Waterways Regulations require 100% of the ground floor to be devoted to facilities of public accommodation. Ground floor facilities of public accommodation, such as restaurants, supermarkets, retail establishments and civic and cultural uses, are critical to the activation of waterfront areas, perhaps more so in Fort Point Historic Sudistrict South.

Although most of the new development envisioned for the South Boston Waterfront is mixed-use in nature, only the new development in the Fort Point Historic Subdistrict is referred to as “residential mixed-use” in the Public Realm Plan. This terminology reflects the intent that the Fort Point Historic Subdistrict, when built out, will contain a strong concentration of residential uses, building on and complementing the residential component that already exists in this neighborhood. Because there is a stronger focus on

residential uses in this subdistrict, ground floor public uses will be even more critical to the development of an active waterfront area that looks and feels truly public.

11.5 FORT POINT HISTORIC SUBDISTRICT SOUTH: SUBSTITUTIONS AND OFFSETS

Substitution: Building Height

Although an important urban planning objective for this area is for the vacant land to supply much needed housing for Boston residents, other uses also are envisioned for Fort Point Historic Subdistrict South. Retail and commercial uses on the lower floors of structures will provide a mix of uses for the area that will help to create a true neighborhood – one that is active throughout the day and evening. Office and other commercial uses also provide for a compatible mix of uses. We look to the Back Bay as the type and scale of mixed-use neighborhood that we would like to see grow in this area as well.

With respect to building massing in Fort Point Historic South, we look to the historic wharf structures to the immediate north for context. New structures that evoke the urban form and building fabric of the historic wharf buildings will extend the feel of the historic district into this area, and create the new Wormwood neighborhood. The height substitutions developed for this area are in keeping with the heights of historic structures located nearby and, for much of the vacant parcel, are significantly lower than what Chapter 91 would permit on the site.

11.5.1 Building Height - 310 CMR 9.51(3)(e)

Chapter 91 heights for the vacant parcel, shown in Figure 11-2, vary from 55 feet near the water to 330 feet along A Street. In light of the heights achievable under Chapter 91, although substitutions are technically required, the substitute heights will be significantly lower overall than those permitted under the Waterways Regulations.

Fort Point Historic Subdistrict South Height Substitution. For the vacant tract, this Municipal Harbor Plan includes new height zones, which are shown in Figure 11-3. In keeping with the Public Realm Plan, north of the greenway area, heights may rise to a maximum of 150 feet. South of the greenway, heights are limited to 100 feet, sloping downward as buildings approach the South Boston neighborhood. Consistent with the principle contained in both the Waterways Regulations and Public Realm Plan of buildings heights “stepping back” from the waterfront, buildings located along the Channel also must incorporate a 75-foot street wall. The height substitutions are in keeping with the heights of historic structures located nearby, and, for much of the vacant parcel, are significantly lower than what Chapter 91 would permit on the site.

Fort Point Historic Subdistrict South Height Substitution Analysis. The DEP will waive the numerical height requirement if the project conforms to an approved Municipal Harbor



Figure 11-3 Wormwood Area Substitution Provisions

Plan which specifies alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(e). As demonstrated below, this substitute provision will have little, if any, negative impact on the ground level environment.

Massing Analysis. The new height zones created for the vacant tract are, in many instances, less than the Chapter 91 heights for the area. The mean Chapter 91 height for this area is 186 feet, while the mean height under the substitution provision is 123 feet. Thus, the height substitution for the vacant area creates an alternative height that is in keeping both with the historic context and with the permitted heights for the parcel. The representative build-out for the Wormwood area indicates that a maximum development envelope of between 3.7 to 4.5 million square feet is achievable on the site without substitute provisions. The development envelope established with the substitute provisions is approximately 1 million square feet, or approximately 25% of that achievable under Chapter 91.

Massing criteria similar to what is required in the large development parcels also is required in the Wormwood area. The general requirements will ensure that buildings remain relatively condensed in footprint. For example, by requiring a street wall of 75-85 feet and limiting the floorplate of tower elements to 25,000 square feet, the buildings will become taller and slimmer, creating smaller blocks and opening up view corridors. By limiting building heights to 150 feet, we ensure that what is developed is a low-scale district, similar to the historic blocks to the north. The substitute heights will implement the Public Realm Plan, while the combination of height substitutions and the height criteria work together to ensure that new buildings for nonwater-dependent use will remain relatively modest in size, as appropriate for this area of Boston Harbor.

In the Wormwood area, the reorientation of the open space around the configuration of the tunnel box generates a new street and block plan characterized primarily by smaller blocks. The new configuration results in an increase in the number of view corridors between A Street and Fort Point Channel from one to three. These changes increase public access and enjoyment of the waterfront by making it easier to see the waterfront from the surrounding areas, thus inviting access to it.

Wind Analysis. The wind analysis for this parcel indicates that there will be only minor changes in the pedestrian level winds from the Chapter 91 build-out to the MHP build-out along the Channel's Harborwalk south of Summer Street (Locations 1, 2 and 3) or the greenway area (Location 26).

For northwest winds, the pedestrian level winds are Category 1 (Comfortable for Long Periods of Standing or Sitting) for Locations 1, 2 and 3 under both Chapter 91 and the MHP build-outs. In the greenway area, the pedestrian level winds are Category 2

(Comfortable for Short Periods of Standing and Sitting) under both the Chapter 91 and MHP build-out scenarios.

For southwest winds, at Locations 1 and 2, pedestrian level winds are Category 2 under both the Chapter 91 and MHP build scenarios. At Location 3, pedestrian level winds are Category 3 (Comfortable for Walking) at these same 3 coordinates for both scenarios. At location 26, pedestrian level winds are Category 1 under both scenarios.

For northeast winds, pedestrian level winds at Locations 1, 2 and 3 are either Category 1 or Category 2 under both the Chapter 91 and MHP build scenarios. At Location 1, pedestrian level winds are Category 1 under the Chapter 91 build scenario, but become Category 2 under the MHP build scenario. At location 26, pedestrian level winds are Category 1 for both build-out scenarios.

For easterly winds, pedestrian level winds are Category 1 at Locations 1, 2 and 3 for both the Chapter 91 build and the MHP build conditions. At Location 26, pedestrian level winds are Category 2 for both build-out scenarios.

For southeast winds, pedestrian level winds are Category 1 at Locations 1, 2 and 3 for both the Chapter 91 build and the MHP build conditions. At Location 26, pedestrian level winds are Category 2 for both build-out conditions.

Both the Chapter 91 and the MHP build conditions improve pedestrian level winds at many of the coordinates. Only at Location 1 with northeast winds (storm winds) does the MHP build-out result in a deterioration of the pedestrian level environment over the Chapter 91 build-out (Category 1 to 2). This slight change does not render the area unsuitable for the anticipated uses of sitting, standing and walking, and is so minor, that it does not rise to a level for which mitigation measures would be required.

Shadow Analysis. As shown in Figure 8-11, our analysis of the MHP build-out for the Wormwood area indicates that at 9:00 and 10:00 a.m., shadows are cast into the Fort Point Channel. Also, the major interior park space proposed for this area is in shadow. By 11:00 a.m., the watershed is largely free from shadow, and the interior park space is partly in sunlight, while Harborwalk remains largely in shadow. At noon, Harborwalk is mostly in sunlight, as is much of the interior park space. From 1:00 p.m. on, there is very little to no shadow cast on Harborwalk. From noon until 2:00 p.m., the interior open spaces are more in sunlight than in shadow. Beginning at 3:00 p.m. and continuing until the sun sets, the interior open spaces are more in shadow than in sun. Except for the earlier morning hours, some portion of the shadow protection zone remains in sunlight throughout the day. At midday, both the Harborwalk and interior open spaces receive a great deal of sunlight. As the afternoon progresses, and the interior open spaces become shaded, Harborwalk is in full sunlight.

A comparison of the Chapter 91 build and MHP build scenarios provides us with an estimate of 13,623 square feet of net new shadow in the shadow protection zone for the

MHP build scenario in the Wormwood area, a relatively small amount in view of the anticipated development envelope. As shown in Figure 8-13, the net new shadow in the earlier morning hours (9:00 and 10:00 a.m.), falls entirely within the Channel. At 11:00 a.m. the net new shadow covers a portion of the Harborwalk as well as Channel watersheet. By noon, only a small portion of Harborwalk is affected by net new shadow, and from 1:00 p.m. through the rest of the afternoon, the Harborwalk remains free from shadow entirely.

Offsets for Impacts of Fort Point Historic Subdistrict South Height Substitution. Height substitutions are permitted in a Municipal Harbor Plan provided the plan specifies “alternative height limits and other requirement which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith.” 310 CMR 9.51(3)(e). As discussed in greater detail above, this plan’s massing criteria ensures that buildings for nonwater-dependent use will be relatively modest in size, and will minimize wind and shadow impacts. The wind analysis identified minor wind impacts that do not render any portion of the site unsuitable for the anticipated activities of sitting, standing and walking. The shadow analysis identified shadow impacts caused by the height substitutions that are in excess of the shadow impacts of the Chapter 91 build-out. The program of offsets developed for the Wormwood area is designed specifically to offset these additional shadow impacts.

The Wormwood area offsets are a combination of measures that we believe will be effective at counteracting negative impacts to the pedestrian-level environment caused by the substitute provisions for the site. Unlike large development parcels in the Inner Harbor, an in-kind numerical offset for the Wormwood area height substitution would not undercut the rationale for the substitution. In fact, this is the primary offset for the height substitution. Other types of numerical offsets also are appropriate, such as additional open space. Qualitative offsets designed to activate the land and watersheet year-round also are appropriate, but unlikely to be necessary given the level of the numerical offsets built-in to the MHP build scenario.

Certain of the offsets are designated as required offsets. Although we do not know the exact amount of net new shadow that will be cast by an actual project in the Wormwood area, we can use the MHP build scenario to estimate the amount of net new shadow that will be generated by an actual project in order to understand the approximate level of offset that will be required. To the extent that offsets from the list below are insufficient to offset the full amount of net new shadow, qualitative offsets will be required to make up the balance.

Lower Heights in the Development Site (Required Offset). As shown by a comparison of Figures 11-2 and 11-3, the MHP height zones in the Wormwood Area mandate heights lower than the heights under the Waterways Regulations on a much larger portion of the jurisdictional area than it permits heights in excess of the Waterways Regulations. The

property owners may offset net new shadow impacts with the areas that the MHP height zones mandate lower heights than the Waterways Regulations on a 1:1 basis.

Additional Open Space (Required Offset). The Municipal Harbor Plan open space configuration, shown in Figure 8-2, depicts a lot coverage ratio of 39% for the Wormwood Area, 11% smaller than the corresponding provision of the Waterways Regulations. The build-out of this area likely will vary from this lot coverage ratio. To the extent that the eventual lot coverage ratio is less than 50%, the additional open space may be used to offset net new shadow at a ratio of 2:1, provided the additional is open space is for public recreation, such as parks and plaza areas.

Four-Season Room. To complement open space and water-related facilities on the Channel, the property owners may create a four-season room. The four-season room and exterior viewing area should be designed to be complementary and to provide people with different options, depending upon the weather. As with Fan Pier's Harbor Hall, the exterior space should include glass walls that can be opened onto the exterior space in the good weather, and closed to provide a protected viewing and sitting area in the colder months, and comply with the other criteria detailed in Section 8.9. The property owners may offset shadow impacts with the amount of floor space devoted to these uses on a 1:1 basis.

Civic, Cultural and Educational Civic Facilities. The Wormwood area property owners should consider including a major civic, educational or cultural facility in the MHP Area. The property owners may offset shadow impacts with amount of floor space devoted to this use on a 1:1 basis.

Upper Floor "Active" Facilities of Public Accommodation. To the extent that any development project in the Wormwood MHP Area includes "active" facilities of public accommodation on upper floors, the owners may offset shadow impacts with the amount of floor space devoted to these uses at a ratio of 0.25:1.

Qualitative Offsets. To the extent that the amount of the above public benefits is insufficient to offset the full level of net new shadow generated by an actual project, the remaining level of net new shadow must be offset with additional qualitative offsets, such as providing a water transportation subsidy or service, or additional public water-related benefits above and beyond the Chapter 91 requirement for the site.

Water Transportation Subsidy or Service. A water transportation service, such as the Cultural Loop, or subsidy, would be an appropriate offset for this site.

Public Water-Related Facilities. The Channel watersheet can accommodate a number of new public-water related facilities, such as a boat house, or public access piers and floating structures. Because this type of watersheet use will be important to the activation of the Channel waterfront and watersheet, and will give people a reason to come to the area, it will be an appropriate offset of shadow impacts for development in the Wormwood area.

Conclusion. The program of offsets developed for the Wormwood area is designed specifically to offset these additional shadow impacts by mandating lower heights at a portion of the site, and by giving people other opportunities to enjoy the waterfront area, such as additional open space, interior viewing area, or a public boat house. The standard for height substitutions requires that alternative height limits and other requirements ensure that, in general, buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith. As demonstrated above, the substitute heights, together with the massing criteria, urban design guidelines and offsetting measures developed for the Wormwood area meet this standard.

11.6 60 NECCO COURT: SUBSTITUTIONS AND OFFSETS

Substitutions: Water-Dependent Use Zone, Lot Coverage, Open Space and Building Height

60 Necco Court, shown in Figure 11-3, contains approximately 11,500 square feet of land area, all of which is located within Chapter 91 jurisdiction. It is surrounded by historic wharf structures on two sides, and by Fort Point Channel and the vacant tract on the other two sides. Although this parcel is adjacent to the vacant tract, its orientation to the Channel and existing wharf structures suggest it should be treated as an infill parcel for the purpose of defining substitution provisions.

60 Necco Court is similar in many respects to the Barking Crab site, and like the Barking Crab can play an important role in providing public access to the City's waterfront. With the CA/T Project completing Harborwalk along much of Fort Point Channel and the Children's Museum and the MBTA completing Harborwalk in the area adjacent to the Barking Crab, this parcel is another critical link in the City's Harborwalk chain, and will connect the CA/T Harborwalk along the vacant tract to the arcade-style Harborwalk at 303 Congress Street.

Future redevelopment of the site could accommodate a small hotel, office or residential building, each of which would complement existing uses in the built portion of the subdistrict to the north and new uses planned for the vacant land to the south. It is also possible that the site may be used for water-dependent uses, or some combination of nonwater-dependent and water-dependent uses. Given the physical restrictions of the site, it is important that the owner be provided with as much flexibility as possible so that any redevelopment will be economically viable. In order to permit redevelopment of this site for nonwater-dependent uses, or mixed water-dependent and nonwater-dependent uses, a set of substitutions from the Waterways Regulations, discussed below, is required.

The program of substitutions developed for this site is based upon the small size and unique characteristics of this site. The goal of these substitutions is to provide the owner with a viable redevelopment option that also promotes the public's rights in the tidelands.

Without substitutions for several provisions of the Waterways Regulations, redevelopment for additional nonwater-dependent uses cannot occur. Although the program of substitutions developed for this parcel is similar to those developed for the Barking Crab, it is its closest neighbor, 303 Congress Street, that guided our thinking for 60 Necco Court.

11.6.1 Water-Dependent Use Zone – 310 CMR 9.51(3)(c)

The City's primary water-dependent use goal for this site is to provide public access to the Channel waterfront. The most effective way to accomplish this goal will be to connect the CA/T Harborwalk to the Harborwalk at 303 Congress Street.

60 Necco Court Water-Dependent Use Zone Substitution. The size of the water-dependent use zone varies with the depth of the waterfront parcel. Along 60 Necco Court, the water-dependent use zone is 25 feet, the minimum permitted under the Waterways Regulations without a substitute provision. See Figure 11-2. The substitution is to permit a reduction of the water-dependent use zone to 12 feet in order to accommodate Harborwalk. See Figure 11-3.

60 Necco Court Water-Dependent Use Zone Substitution Analysis. The DEP will waive these numerical standards if the project conforms to an approved Municipal Harbor Plan which specifies alternative setback distances and other requirements which ensure that new buildings for nonwater-dependent use are not constructed immediately adjacent to a project shoreline, in order that sufficient space along the water's edge will be devoted exclusively to water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(c).

The Waterways Regulations require that buildings for nonwater-dependent use not be constructed immediately adjacent to a project shoreline, in order that sufficient space be maintained along the water's edge for water-dependent activity, as appropriate for the harbor in question. By requiring Harborwalk at this site to be open to the sky, we ensure that this element of the regulatory standard is met.

60 Necco Court is adjacent to the large vacant site in this portion of the subdistrict. No substitution is included for the vacant parcel. The water-dependent use zone will run the full length of the site and be 100 feet deep for a total setback area of approximately 69,900 square feet. This large expanse of vacant land brings with it the opportunity to create a large waterfront zone that can support the high level of activation envisioned for the Fort Point Channel. This stretch of waterfront property can provide access to the Channel waterfront and, more important, to the Channel watershed for all manner of water-dependent activity, including public access, boating, public floating structures, etc.

Given the small size of the Necco Court parcel, the small size of the regulatory setback area, and the expanse of vacant waterfront property directly to the south, 60 Necco Court can add little to the area's ability to provide watershed access. But this site does have a role to play in promoting watershed activity, and in increasing public access. What this

site must do is complete the Harborwalk link to 303 Congress Street. The substitute water-dependent use zone of 12 feet is designed to provide a viable redevelopment option for the parcel to help to ensure that this connection is completed.

Given that 60 Necco Court is only 99 feet deep, redevelopment of this parcel is not possible without a substitution for the regulatory water-dependent use zone. The Waterways Regulations standard results in approximately 2975 square feet of setback area, while the substitute provision provides only 1,452 square feet of setback area. While the substitute water-dependent use zone is appropriate for the role that 60 Necco Court will play in providing public access to this portion of the waterfront, it nonetheless results in a reduction of waterfront open space by 1523 square feet. An appropriate offset for this substitute provision is a contribution to the Parks Fund based on the reduction in waterfront area caused by the substitute provision.

Offsets for Impacts of 60 Necco Court Water-Dependent Use Zone Substitution. Given the density of the historic wharf district and the lack of public open space in that location, it is important to offset any loss of open space, waterfront or otherwise, with additional open space at another location. For lot coverage substitutions in Fort Point Historic Subdistrict North, we require property owners to contribute to the Parks Fund for every square foot their project exceeds the 50% regulatory lot coverage ratio. This allows us, in a sense, to aggregate the open space requirement of all of these parcels to provide a more significant park space for the neighborhood.

A contribution to the Parks Fund is also an appropriate offset for the 60 Necco Court water-dependent use zone substitution. 60 Necco Court is fortunate in that it will be located next to the signature open space in the subdistrict. By offsetting the reduction in setback area at 60 Necco Court with a contribution to the Parks Fund, we can use the site's reduction in setback area to help create a more significant neighborhood park space for area residents. Thus, for every square foot less of setback area, the property owner will be required to contribute a one-time payment of \$75 per square foot and an annual payment of \$2 per square foot to the South Boston Waterfront Account in the City's Parks Fund.

As discussed above, this substitution and corresponding offset meet the regulatory standard for approval. The substitute setback, which will help to create the necessary conditions for redevelopment to be feasible at this site, also is sufficient to accommodate Harborwalk. By requiring a contribution to the Parks Fund as the offsetting measure for this substitution, we are aggregating the setback area with the open space requirements of other area sites, which enables us to provide residents and visitors with a more significant public open space than the regulatory provision. The substitute setback provision for 60 Necco Court, together with the offsetting requirement, ensures that sufficient space along the water's edge will be devoted exclusively to water-dependent activity, especially public access, as appropriate for the harbor in question, with comparable or greater effectiveness than the corresponding provision of the Waterways Regulations.

11.6.2 Lot Coverage and Open Space - 310 CMR 9.51(3)(d)/310 CMR 9.53(2)(b)

60 Necco Court is one of the areas of the South Boston Waterfront for which we believe that an increase in the lot coverage percentage is appropriate. In the southern, unbuilt portion of this subdistrict, and in the vast majority of the sites in the Inner Harbor, the 50% requirement is maintained.

60 Necco Court Lot Coverage Substitution. The Waterways Regulation limit the lot coverage ratio of new structures for nonwater-dependent uses to 50%. For 60 Necco Court, similar to the infill parcels in Fort Point Historic Subdistrict North, a lot coverage ratio greater than 50% will be permitted. No specific alternate lot coverage ratio is established. The property owner will be permitted the flexibility to establish an appropriate lot coverage ratio for the specific building parcel in consultation with the BRA design review staff during the Article 80 review process.

60 Necco Court Lot Coverage Substitution Analysis. The Waterways Regulations require that, with respect to private as well as Commonwealth tidelands, structures for nonwater-dependent uses not exceed a 50% lot coverage ratio. Lot area used for water-dependent purposes is not subject to the 50% limitation. The DEP shall waive this numerical standard if the project conforms to an approved Municipal Harbor Plan which specifies alternative site coverage ratios and other requirements which ensure that, in general, buildings for nonwater-dependent purposes will be relatively condensed in footprint, in order that an amount of open space commensurate with that occupied by such buildings will be available to accommodate water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(d).

60 Necco Court contains approximately 11,500 square feet of land area. Applying a lot coverage ratio of 50% would yield approximately 5,750 square feet less of open space in the area. Given the small size of the parcel, it is also unlikely that redevelopment will occur without a substitution for the regulatory provision. Of the infill parcels in Fort Point Historic North, 60 Necco Court is closest in size to 321-323 Congress Street. As with the infill parcels in Fort Point Historic North, because this lot is so small, any new structures necessarily will remain condensed in footprint, even if the lot coverage ratio is increased to 85%, like 303 Congress Street, or even 90%.

60 Necco Court is immediately adjacent to what will become a signature open space area for this entire subdistrict. While an additional small park area adjacent to the greenway area would, of course, add to public waterfront access at this location, it is extremely unlikely that 60 Necco Court would be built out without a lot coverage substitution. The site currently is used for Central Artery staging, and, when the CA/T Project is complete, will be returned to its prior use as a surface parking lot. By permitting a viable redevelopment option at this location, we can provide better public access through the completion of Harborwalk at this site, and through contributions to the Parks Fund that are earmarked for the acquisition and maintenance of public parks in the area.

Offset for Impacts of 60 Necco Court Lot Coverage Substitution. 60 Necco Court is very similar to the infill parcels in the northern portion of the subdistrict. Like the infill parcels to the north, given the density of the existing neighborhood, and the lack of public open space, it is important to offset negative impacts of the substitute lot coverage ratio with an in-kind quantitative offset of the same numerical requirement. As it is not possible to do an on-site, in-kind quantitative offset without defeating the purpose of the substitution, an appropriate offset for a flexible lot coverage substitution for 60 Necco Court also is a contribution to the Parks Fund.

By aggregating the open space and setback area requirements for small parcels, we create an offsetting measure that will provide residents and visitors with a more significant public open space than the regulatory provision. Contributions to a specified account in the Parks Fund from property owners seeking to take advantage of substitute lot coverage and setback provisions will fund a more significant park space for area residents than the small pocket parks that would arise from application of the 50% lot coverage ratio, assuming development, under such conditions, is even feasible.

This lot coverage substitution and corresponding offset meet the regulatory standard for approval. The flexible lot coverage substitution developed for infill development in this district will continue to ensure that buildings for nonwater-dependent purposes will be relatively condensed in footprint, while also helping to create the necessary conditions for redevelopment to be feasible in the area. By permitting, in effect, an aggregation of the open space requirement, the offsetting measure will provide residents and visitors with a more significant public open space than the regulatory provision. Thus, the substitution and corresponding offset together ensure that an amount of open space commensurate with that occupied by nonwater-dependent buildings will be available to accommodate water-dependent activity and public access, as appropriate for Fort Point Historic Subdistrict South, with comparable or greater effectiveness than the Waterways Regulations.

60 Necco Court Open Space Substitution and Offset. To the extent that the eventual build-out of infill parcels in the Fort Point Historic North Subdistrict take advantage of the lot coverage substitution, and result in less open space in the MHP Area, it will cause a proportionate reduction in exterior open spaces for active or passive recreation. The substitute provision for this requirement is to permit infill parcels to provide less space for public recreation facilities than required under the Waterways Regulations, provided that this substitute provision may be used only in connection with the lot coverage substitution. The lot coverage substitution is offset with a contribution to the Parks Fund. This open space substitution is offset with the requirement that the contribution be sufficient, on a square footage basis, sufficient to design, construct and maintain first class urban park space. As discussed in Sections 8.9 and 11.2.1, the offset for this substitution is a one-time payment of \$75 per square foot plus an annual payment equal to \$2 per square foot to The South Boston Waterfront Account of the Parks Fund.

60 Necco Court Open Space Substitution Analysis. For nonwater-dependent use projects located on Commonwealth tidelands, that portion of the site not located in the building footprint must include exterior open spaces for active or passive public recreation, such as parks, plazas and observation areas. The amount of such space shall be at least equal to the square footage of all Commonwealth tidelands on the project site landward of the project shoreline and not within the footprint of any buildings, less any space deemed necessary by the DEP to accommodate other water-dependent uses. The DEP shall waive this requirement if the project conforms to an approved Municipal Harbor Plan that specifies alternative requirements for public outdoor recreation facilities that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. 310 CMR 9.53(2)(b).

The Waterways Regulations permit us to specify alternative requirements for public outdoor recreation facilities that will establish the project site as a year-round locus of public activity in a comparable and highly effective manner. The requirement to contribute to the Parks Fund allows us to aggregate the open space requirements of several parcels, in order to obtain a more significant park area. The requirement that the amount of that contribution be sufficient to build out first class urban park space ensures that we will obtain high quality open space suitable for active or passive recreation. The combination of the lot coverage substitution and the open space substitution together with their corresponding offsets meet the regulatory standard for approval.

11.6.3 Building Height – 310 CMR 9.51(3)(e)

The purpose of the height substitution at 60 Necco Court is to permit a height that is consistent with the historic wharf structures throughout the historic district, and with the structures immediately adjacent to the site.

60 Necco Court Height Substitution. The Chapter 91 height for 60 Necco Court is 55 feet. See Figure 11-2. A height substitution of 80 feet is established for this site in order to be consistent with the historic fabric and the immediate surroundings, as shown in Figure 11-3. Heights of the historic wharf structures in the district range from 75-125 feet. 303 Congress Street, immediately to the north of the site is 80 feet. The two buildings directly to the east of 60 Necco Court are 70 and 80 feet high, respectively. As with infill structures in Fort Point Historic Subdistrict North, build-out at 60 Necco Court must be consistent with the existing building line and the definition of the surrounding sidewalk.

60 Necco Court Height Substitution Analysis. A Municipal Harbor Plan may specify alternative height limits and other requirements which ensure that, in general, such buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith, as appropriate for the harbor in question. 310 CMR 9.51(3)(e).

The height substitution for this site creates an alternative height that is in keeping with the historic context and with the parcel's immediate surroundings. The massing, wind and shadow analyses, below, indicate little in the way of impacts on the pedestrian level environment on account of the substitute height.

Massing Analysis. A height substitution at this site serves two purposes. First, it will permit a height at this location that is consistent with the historic wharf structures to which it is immediately adjacent. Second, the substitute height is designed to be sufficient to give the property owner incentive to redevelop the site, so that we obtain this important Harborwalk link.

Wind Analysis. The wind analysis for this parcel indicates that there will be no change in the pedestrian level winds from the Chapter 91 build-out to the MHP build-out Harborwalk location (Location 3) closest to the site.

For northwest winds, the pedestrian level winds at Location 3 are Category 1 (Comfortable for Long Periods of Standing and Sitting) for Chapter 91 build and MHP build conditions.

For southwest winds, pedestrian level winds at Location 3 are Category 3 (Comfortable for Walking) for Chapter 91 build and MHP build conditions.

For northeasterly winds, pedestrian level winds at Location 3 are Category 1 for Chapter 91 build and MHP build conditions.

For easterly winds, pedestrian level winds at Location 3 are Category 1 for Chapter 91 build and MHP build conditions.

For southeast winds, pedestrian level winds at Location 3 are Category 1 for Chapter 91 build and MHP build conditions.

Both the Chapter 91 and the MHP build conditions actually result in minor improvement in pedestrian level winds over the no build condition. For easterly and southeasterly winds, the no build condition results in Category 2 pedestrian level winds (Comfortable for Short Periods of Sitting and Standing). As the wind analysis for Location 3 demonstrates, however, there is no change in the pedestrian level winds from the Chapter 91 build condition to the MHP build condition.

Shadow Analysis. As shown in Figure 8-11, a structure at this location will cast shadow on the Harborwalk and into the Channel itself from 9:00 a.m. until noon. Until 1:00 p.m., shadows continue to cover much of the Harborwalk at this location. From 2:00 p.m. on, shadows are cast on existing buildings to the north, then northeast, while Harborwalk remains in sunlight for the rest of the afternoon.

As shown in Figure 8-13, the net new shadow studies show little in the way of shadow impacts from the MHP build scenario. In the morning, small amounts of additional

shadow are cast in the watersheet. At 1:00 p.m., the MHP build results in a small amount of net new shadow on Harborwalk. By 2:00 p.m., there are no net new shadow impacts from the MHP build scenario cast on the shadow protection zone. Because of the small size of the structure, and the minimal height substitution, the net new shadow has little impact on the pedestrian-level environment.

Offset for Impacts of 60 Necco Court Height Substitution. In many of the large development sites, the substitute provisions provide a great deal of flexibility to the property owner with respect to the massing and design of their sites, and changes in massing and design can result in changes in wind and shadow impacts. While the MHP build condition is useful for estimating impacts, it is not until the actual massing is tested that we know the actual level of impact, and can finalize the level of offset. With smaller sites such as 60 Necco Court, there is much less flexibility with respect to massing. Accordingly, it is more likely that our estimate of the shadow impacts on the site will more closely approximate actual impacts.

Determining the appropriate level of offsets for 60 Necco Court is necessarily a qualitative determination. Given the small size of the site, it is not possible to offset impacts with in-kind offsets without defeating the purpose of the substitution. Also, similar to the Barking Crab site, the size and configuration of 60 Necco Court do not lend themselves to the application of performance standards as a mechanism for evaluating the appropriate level of offset. Application of the performance standards require a level of flexibility that small sites inherently lack.

As demonstrated above, the MHP build condition at 60 Necco Court will have little negative impact on the pedestrian-level environment. The size and configuration of the site also limit the level of offset that redevelopment can support. The menu of offsets below were carefully chosen to offset the negative shadow impact in a manner that will provide people with additional options, such as interior public spaces (the four-season room), or rooftop viewing areas which may be partially inside and partially outside, or ways to get out onto the water. The level of impact is not high, and the level of offset must be proportionate to the level of impact. The appropriate offset will be determined during the Article 80 and Chapter 91 licensing processes.

Rooftop Viewing Area and Four-Season Room. 60 Necco Court is another good location for either a combination rooftop viewing area and four-season room, or a ground level four-season room. Given the limited negative impact of the height substitution, such a facility need not occupy the entire ground floor or roof, as the case may be. The appropriate size will be left to the Article 80 and Chapter 91 review processes.

Civic, Cultural or Educational Facility. A civic or cultural facility can be used to offset impacts of the site's height substitution.

Water Transit Subsidy or Service. A water transportation subsidy or service also can be used to offset impacts of the site's height substitution.

Public Water-Related Facilities. Public water-related facilities in excess of the Chapter 91 requirements for the site also can be used to offset impact of the site's height substitution.

As demonstrated above, this substitute provision, combined with the offsetting measures, will ensure that redevelopment of 60 Necco Court for nonwater-dependent use will result in a structure that is relatively modest in size, in order that wind, shadow, and other conditions of the ground level environment will be conducive to water-dependent activity and public access associated therewith, as appropriate for the harbor in question, with comparable greater effectiveness than the Waterways Regulations.

11.7 CONSISTENCY WITH STATE TIDELANDS POLICY OBJECTIVES

Standards for approval of a Municipal Harbor Plan are set forth at 301 CMR 23.05 and require consistency with state tidelands policy objectives, as set forth in the state Waterways Regulations at 310 CMR 9.00, and summarized in the MHP Regulations at 301 CMR 23.05(3)(a). The MHP Regulations identify ten primary state tidelands policy objectives. The manner in which the South Boston Waterfront Municipal Harbor Plan is consistent with each of these objectives, including the substitute and offset provisions in the Fort Point Historic Subdistrict MHP Area, is discussed in more detail below.

Policy Objective #1 - To ensure that development of all tidelands complies with other applicable environmental regulatory programs of the Commonwealth, and is especially protective of aquatic resources within coastal Areas of Critical Environmental Concern, as provided in 310 CMR 9.32(1)(e) and 9.33.

The MHP Area does not include an Area of Critical Environmental Concern. However, as part of Large Project Review under Article 80 of the Boston Zoning Code, the BRA requires the preparation of a Project Impact Report that addresses urban design environmental impacts, such as wind, shadow, daylight, solar glare, air and water quality, geotechnical impacts and solid and hazardous wastes. This intensive review process supplements the Environmental Impact Report required under MEPA. A number of other agencies, such as the Boston Transportation Department, the Boston Water and Sewer Commission, the Massachusetts Water Resources Authority, the Massachusetts Port Authority and the Massachusetts Bay Transportation Authority, may participate in the Large Project Review process to help ensure that the concerns of all applicable regulatory programs are adequately addressed.

Policy Objective #2 - To preserve any rights held by the Commonwealth in trust for the public to use tidelands for lawful purposes, and to preserve any public rights of access that are associated with such use, as provided in 310 CMR 9.35.

Section 9.35 of the Waterways Regulations require that all tideland projects preserve the public's rights of navigation, free passage over and through the water, fishing, fowling and the right to walk or pass freely for purposes of fishing, fowling or navigation, and on Commonwealth tidelands, the right to walk or pass freely for all lawful activities. As more particularly described below, the provisions of this Municipal Harbor Plan as they pertain to the Fort Point Historic Subdistrict preserve the rights held by the Commonwealth in trust for the public to use tidelands for lawful purposes and the public's rights of access that are associated with such use, as required by 310 CMR 9.35.

Chapter 7 of this Municipal Harbor Plan includes extensive Open Space and Public Space Baseline Requirements and Guidelines that are applicable to all projects in the MHP Area. One of the primary purposes of these requirements is to ensure that open spaces and public spaces in the MHP Area are designed, constructed, maintained and programmed in a manner that not only preserves the public's rights in the tidelands, but enhances them as well. Chapter 7 addresses the following:

- Open Space and Public Access Plan
- Water Transit Requirements
- Harborwalk
- General Standards and Guidelines for the Watersheet
- Lot Coverage Calculation
- 24 Hour Public Access
- Public Space Amenities
- Maintenance Plan and Standards
- Programming and Activation of Public Spaces
- Signage, Maps and Information
- Urban Design Guidelines
- Universal Access Design Standards

To the extent that certain of the issues addressed in Chapter 7 also are addressed in the Waterways Regulations, the Chapter 7 requirements generally are more demanding. For example, with respect to the lot coverage calculation, the Waterways Regulations permit up to 25% of a lot area to be devoted to roadways and surface parking. This Municipal Harbor Plan prohibits surface parking facilities, and limits the lot area that may be devoted to roadways to 20%. Also, while the Waterways Regulations require compliance with the ADA requirements and guidelines, Section 7.7.2 of this Municipal Harbor Plan establishes detailed Universal Access Design Standards for projects designed to make the waterfront and watersheet accessible to people of all ages and abilities.

Chapter 7 also establishes requirements for which there is no counterpart in the Waterways

Regulations, all of which will further enhance the public's rights in the tidelands, as well as their ability to exercise those rights. For example, Section 7.5 regarding open space and public space includes the requirement to incorporate cultural, historic and educational uses and programming into projects, as well as requirements to ensure that as new public spaces are designed and constructed, they are able to accommodate a variety of programming options, from the occasional festival to the space for quiet relaxation and reflection. Section 7.7.1 establishes detailed urban design guidelines many of which are geared toward enhancing the pedestrian experience by requiring, among other things, the preservation of existing view corridors, the creation of new view corridors and that building mass be divided vertically to establish a pedestrian-scale.

The substitution and offset provisions for the Fort Point Historic Subdistrict, which are extremely modest in both scope and impact, also preserve and enhance the public's rights in the tidelands.

With respect to the Fort Point Historic Subdistrict North, the predominant building form is late nineteenth and early twentieth century brick warehouse structures that range from 75 – 125 feet in height. The substitutions for the parcels in this portion of the subdistrict, all of which are infill parcels or portions of infill parcels, are designed to emulate the massing of the existing historic structures. For this reason, for each of the infill parcels, a lot coverage and corresponding open space substitution is included. The largest of these lots is only 12,000 square feet, so that a lot coverage ratio greater than 50% will not result in building footprints that are unduly large or out of scale with the existing context. The greater lot coverage and corresponding loss of public recreational open space is offset with a contribution to a new account that will be established in the City's Parks Fund that will be earmarked for the South Boston Waterfront. The amount of the contribution is sufficient to design, construct and maintain first class urban park space. Because the lots in this area are relatively small, a contribution to the Parks Fund will permit us to aggregate the open space requirements of several properties in order to provide public park space that is more significant in both size and design. The result is that this substitute provision, together with its corresponding offset, will not only preserve but will enhance the public's rights in the tidelands.

The height substitution for Parcel E is to allow a height of 75 feet on the entire site. The height substitution for this site creates an alternative height that is in keeping both with the historic context and with the permitted heights for the parcel. The wind and shadow analyses indicated little in the way of impacts on the pedestrian-level environment. This substitute provision simply levels off the permitted height for Parcel E at a height that is both within the range permitted under Chapter 91 and consistent with the historic context. The level of impact is not high, and the level of offset must be proportionate to the level of impact. The menu of offsets, which includes providing a ground floor or upper level four-season room, civic or cultural facilities, and additional public water-related facilities were chosen to offset the negative shadow impact in a manner that will provide people with additional options, such as interior public spaces (the four-season room) or rooftop viewing, or ways to get out onto the water. The minor level of impact on the pedestrian

level environment will be more than offset by the provision of one of these public amenities, thereby preserving the public's rights in the tidelands.

The primary substitution in the Fort Point Historic Subdistrict South is a height substitution for the large parcel of vacant land recently purchased by the Gillette Company. The new height zones created for the vacant tract are, in many instances, less than the Chapter 91 heights for the area. The mean Chapter 91 height for this area is 186 feet, while the mean height under the substitution provision is 123 feet. Thus, the height substitution for the vacant area creates an alternative height that is in keeping both with the historic context and with the permitted heights for the parcel. The wind and shadow analyses indicate no significant wind impacts and only minor shadow impacts on account of the height substitution. The in-kind and numerical offsets for this parcel, that is, the height-for-height and open space-for-height offsets, preserve the public's rights in the tidelands by mandating lower heights overall than the Waterways Regulations, and requiring more open space than the Waterways Regulations.

A program of substitutions and offsets also was developed for 60 Necco Court. The substitutions and offsets are based upon the small size and unique characteristics of this site. Substitutions for the water-dependent use zone, lot coverage, open space and height provisions of the Waterways Regulations are included in order to provide the owner with a viable redevelopment option that also promote the public's rights in the tidelands. As discussed in greater detail in Section 11.6, the water-dependent use zone, lot coverage and open space substitutions will be offset with contributions to the Parks Fund, in order to aggregate the open space requirements of this site with those of other small properties nearby. The City's primary public access and water-dependent use goal for this site is to provide public access to the Channel waterfront. The height substitution for 60 Necco Court will permit a height that is consistent with the historic wharf structures to which it is immediately adjacent, and is designed to be sufficient to give the property owner incentive to redevelop the site, so that we obtain this important Harborwalk link. Offsetting the minor wind and shadow impacts at this site with public amenities such as a four-season room, or rooftop viewing will preserve the public's rights in the tidelands by providing people with additional options for waterfront recreation spaces, while additional water-related facilities will provide additional options for watersheet access.

Policy Objective #3 - To preserve the availability and suitability of tidelands that are in use for water-dependent purposes, or which are reserved primarily as locations for maritime industry or other specific types of water-dependent use, as provided in 310 CMR 9.32(1)(b) and 9.36.

Large portions of the Fort Point Channel watersheet adjacent to the Fort Point Historic Subdistrict are not currently in use for water-dependent purposes. Basin B of Fort Point Channel will include a new water transportation facility either at Russia Wharf or at the Boston Edison site. Other uses in this basin are the Tea Party Museum, the M.V. Chelsea and watersheet activities related to the Children's Museum. Basin C currently is not in use

for water-dependent purposes. The Gillette Company, located adjacent to Basin D, currently uses the waters of Fort Point Channel in its manufacturing processes and depends upon maintaining water quality within certain parameters.

The Public Realm Plan envisions a variety of new public water-dependent structures and uses in and along Fort Point Channel, including water transportation, small boat rentals, educational and cultural facilities and, of course, Harborwalk. As part of the public process for this Municipal Harbor Plan, the BRA formed the Fort Point Channel Working Group made up of members of the Municipal Harbor Plan Advisory Committee, property owners along the Channel and other interested parties. The goal of the Fort Point Channel Working Group is to develop a Public Activation Plan for the Channel that will include a set of preferred implementation strategies to achieve the plan. The purpose of the Public Activation Plan is to provide a blueprint for the development of new uses and structures that will make the make Fort Point Channel a great civic space.

The Fort Point Channel Working Group began its work by studying a myriad of issues relating to Fort Point Channel, including existing conditions, such as water quality and sediment; possible new watersheet uses and structures and their impacts on the Channel's waters and the Channel bed; and strategies for implementing the plan. It is not our intent that new uses or structures in the Channel should impair the Channel's flushing capacity, interfere with the MWRA's program to reduce combined sewer overflow into Fort Point Channel or degrade water quality. It is our intent that the status of Fort Point Channel as an important public resource be enhanced by new nonwater-dependent development along the Channel and that new and existing water-dependent uses and structures should enhance public access and not result in a privatization of the watersheet area.

Policy Objective #4 - To ensure that all licensed fill and structures are structurally sound and otherwise designed and built in a manner consistent with public health and safety and with responsible environmental engineering practice, especially in coastal high hazard zones and other areas subject to flooding or sea-level rise, as provided in 310 CMR 9.37.

Although project drawings are reviewed by BRA planners as part of development review under Article 80, the City does not have the primary responsibility for assuring the structural soundness of buildings. Issues of building integrity are regulated by the State Building Code, and plan review is undertaken by state inspectors. Plans for building in flood zones are reviewed by the Federal Emergency Management Agency. This Municipal Harbor Plan is fully consistent with the effective implementation of Policy Objective #4 by the proper agencies.

Policy Objective #5 - To ensure patronage of public recreational boating facilities by the general public and to prevent undue privatization in the patronage of private recreational boating facilities, as provided in 310 CMR 9.38; and to ensure that fair and equitable methods are employed in the assignment of moorings to the general public by harbormasters, as provided in 310 CMR 9.07.

The placement on a temporary basis of moorings, floats, or rafts, including marinas, and vessels held by bottom anchor is subject to an annual permit from the harbormaster. In some instances a public hearing is required and the harbormaster's written determination must include certain findings, including that the project will serve a proper public purpose and not interfere with navigation, among others. These instances include floats or rafts that extend beyond the state harbor line, encompass an area greater than 2,000 square feet, or constitute a marina. 310 CMR 9.07(2)(b). Marinas must also conform to the requirements of 9.39(1). DEP may review the harbormaster's permit within 30 days and may affirm it, set it aside or amend it as it deems necessary. 310 CMR 9.07(2).

Because watersheet use and management is increasingly becoming a planning issue, the BRA would like the opportunity to provide comment on all new 10A permit applications for moorings, floats, rafts, marinas and permanently-moored vessels within the watersheet of the South Boston Waterfront Municipal Harbor Plan area, whether or not they meet the requirement for a public hearing, in order to evaluate such proposals against the City's planning efforts. Therefore, for proposed activities in the watersheet of the MHP Area, the BRA is requesting notification and to be given 30 days to provide comment to the harbormaster and/or DEP for consideration in issuing permits. Future reconfiguration of marinas should also be subject to BRA review and comment to the harbormaster and to DEP. It is noted that Massport does not acknowledge BRA jurisdiction within its watersheet; nonetheless, the opportunity for the BRA to provide comment formally or informally will assist in achieving coordination and an overall vision for waterside activities.

In addition, this Municipal Harbor Plan requires that marinas in the South Boston Waterfront comply with the use standards for public recreational boating facilities found in 310 CMR 9.38(1), in order to ensure that marina facilities in the South Boston Waterfront are available to the general public.

Policy Objective #6 - To ensure that marinas, boatyards and boat launching ramps are developed in a manner that is consistent with sound engineering and design principles, and include such pumpout facilities and other mitigation measures as are appropriate to avoid or minimize adverse impacts on water quality, physical processes, marine productivity and public health, as provided in 310 CMR 9.39.

The City's review of any such facilities will be coordinated with state project reviews, and the City will defer to the state with regard to detailed engineering requirements for marinas, docks, and other facilities. This Municipal Harbor Plan is fully consistent with

the effective implementation of such requirements.

Policy Objective #7 - To ensure that dredging and disposal of dredged material is conducted in a manner that avoids unnecessary disturbance of submerged lands and otherwise avoids or minimizes adverse effects on water quality, physical processes, marine productivity and public health, as provided in 310 CMR 9.40.

This Municipal Harbor Plan does not address dredging or disposal of dredged material. This Municipal Harbor Plan is fully consistent with the effective implementation of Policy Objective #7.

Policy Objective #8 - To ensure that nonwater-dependent use projects do not unreasonably diminish the capacity of any tidelands to accommodate water-dependent use, as provided in 310 CMR 9.51.

In order to ensure that nonwater-dependent use projects do not unreasonably diminish the capacity of tideland areas to accommodate water-dependent use, the Waterways Regulations establish baseline requirements regarding the use and dimensions of structures for nonwater-dependent uses. This provision of the Waterways Regulations establishes, among other things, building heights, the dimensions of water-dependent use zones, and lot coverage ratios. This provision also establishes standards for a municipality to develop substitute use and dimensional standards.

This Municipal Harbor Plan includes substitute provisions for the water-dependent use zone, lot coverage and building height provisions of 310 CMR 9.51 for the Fort Point Historic Subdistrict. Also included are a series of offsets that are carefully targeted to offset the negative impacts to the public water-related rights, if any, that are attributable to a particular substitute provision. As discussed in greater detail in Sections 11.2, 11.3, 11.4, 11.5 and 11.6, each substitute provision and corresponding offset meet the regulatory standard for approval, thereby ensuring that the portion of the Municipal Harbor Plan that pertains to the Fort Point Historic Subdistrict does not unreasonably diminish the capacity of the tidelands to accommodate water-dependent use.

Policy Objective #9 - To ensure that nonwater-dependent use projects on any tidelands devote a reasonable portion of such lands to water-dependent use, including public access in the exercise of public rights in said lands, as provided in 310 CMR 9.52.

This provision of the Waterways Regulations establishes baseline requirements for public water-related facilities including facilities that generate water-dependent activity and pedestrian access networks. In applying these requirements, DEP will give particular consideration to applicable guidance specified in a municipal harbor plan. This Municipal Harbor Plan does not include substitutions for this provision of the Waterways

Regulations. Chapter 7, however, entitled Open Space and Public Space Baseline Requirements and Guidelines, establishes a series of requirements and guidelines designed to ensure that both the waterfront and watersheet are open and accessible to the public in a meaningful way.

Section 7.4 establishes general standards and guidelines for the use of the watersheet that are applicable throughout the South Boston Waterfront. Development projects on the South Boston Waterfront should include facilities appropriate to each site that promote water-based public activity, such as ferries for commuters and excursion passengers, water shuttles and water taxis, public landings, fishing areas, docks for the charter or rental of vessels, and floating barges for public performances or for public access. A variety of recreational uses should also be accommodated (sailing, kayaking, pedal boats, rowing) provided these activities are available for patronage by the general public.

Recreational activities should be located in areas where they will not interfere with navigation or water transportation services and where water quality and environmental conditions are suitable. These activities should have associated landside support, such as a boat house or a structure with lockers, restrooms, and some food service.

Water-based facilities should be designed to relate well and function together with landside public areas (whether interior or exterior) and pedestrian amenities, such as the Harborwalk, parks, plazas and play areas, ferry waiting areas, restrooms, boat houses, and fishing-related services.

Some of the uses appropriate to the South Boston Waterfront watersheet are:

- Water Transportation Terminals
- Marinas
- Dockage at Seawalls and Bulkheads
- Shoreline Walkways and Safety Ladders
- Public Landing/Short-Term Dockage
- Transient Dockage for Visiting Boats
- Fishing and Fishing Piers
- New Piers and Floating Structures

The program and type of use included in any one development site will depend on a number of factors, including the location of the site, the proposed development program, and navigational conditions, among others. The type and location of watersheet uses will be determined through the City's Article 80 project review process and the DEP Chapter 91 licensing process.

Section 7.3 includes baseline requirements for water-dependent use zones. This section incorporates the City's Harborwalk standards into the Municipal Harbor Plan, which are more detailed than the requirements of the Waterways Regulations. Section 7.5 includes

requirements applicable to all open and public spaces that address public space amenities and ensuring that people have the amenities that they need to be able to enjoy the waterfront, from benches and restrooms to fishing pole and small boat rentals. Section 7.5 also includes requirements for historic, cultural and educational programming, signage, maps and information that are designed to enhance the experience that the waterfront can provide.

Policy Objective #10 - To ensure that nonwater-dependent use projects on Commonwealth tidelands, except in Designated Port Areas, promote public use and enjoyment of such lands to a degree that is fully commensurate with the proprietary rights of the Commonwealth therein, and which ensures that private advantages of use are not primary but merely incidental to the achievement of public purposes, as provided in 310 CMR 9.53.

Section 9.53 establishes heightened performance standards for nonwater-dependent use projects that are constructed on Commonwealth tidelands. Nonwater-dependent use projects are required to attract and maintain substantial public activity on the site on a year-round basis through the provision of facilities that promote water-based activity, exterior open space for active or passive recreation and interior facilities of public accommodation. The Waterways Regulations establish baseline performance standards that a project must meet in order to satisfy this requirement.

This Municipal Harbor Plan includes substitutions for this provision in conjunction with the lot coverage substitution for infill parcels in the Fort Point Historic Subdistrict. To the extent that infill parcels are permitted to exceed the 50% lot coverage ratio of the Waterways Regulations, there will be a corresponding reduction in the amount of open space available for public recreation. As an offset, developers must contribute an amount to a new account for the South Boston Waterfront in the City's Parks Fund sufficient to design, construct and maintain first class urban park space. By taking advantage of the City's existing Parks Fund and requiring contributions from property owners in exchange for lot coverage and open space substitutions, we can provide area residents and visitors with a more significant, high quality park space in the area. As discussed in greater detail in Sections 11.2 and 11.3, this substitution and offset meet the regulatory standard for approval.

No substitutions for the requirement that the ground floor of any structure containing nonwater-dependent facilities of private tenancy be devoted to facilities of public accommodation are included in this Municipal Harbor Plan.

Chapter 7 of this Municipal Harbor Plan includes extensive Open Space and Public Space Baseline Requirements and Guidelines that are applicable to all projects in the MHP Area. One of the primary purposes of these requirements is to ensure that open spaces and public spaces in the MHP Area are designed, constructed, maintained and programmed in a manner that ensures that the South Boston Waterfront will become an exciting new

destination. Chapter 7 addresses the following:

- Open Space and Public Access Plan
- Water Transit Requirements
- Harborwalk
- General Standards and Guidelines for the Watersheet
- Lot Coverage Calculation
- 24 Hour Public Access
- Public Space Amenities
- Maintenance Plan and Standards
- Programming and Activation of Public Spaces
- Signage, Maps and Information
- Urban Design Guidelines
- Universal Access Design Standards

To the extent that certain of the issues addressed in Chapter 7 also are addressed in the Waterways Regulations, the Chapter 7 requirements generally are more demanding. For example, with respect to the lot coverage calculation, the Waterways Regulations permit up to 25% of a lot area to be devoted to roadways and surface parking. This Municipal Harbor Plan prohibits surface parking facilities, and limits the lot area that may be devoted to roadways to 20%. Also, while the Waterways Regulations require compliance with the ADA requirements and guidelines, Section 7.7.2 of this Municipal Harbor Plan establishes detailed Universal Access Design Standards for projects designed to make the waterfront and watersheet accessible to people of all ages and abilities.

Chapter 7 also establishes requirements for which there is no counterpart in the Waterways Regulations, all of which will further enhance the public's rights in the tidelands, as well as their ability to exercise those rights. For example, Section 7.5 regarding open space and public space includes the requirement to incorporate cultural, historic and educational uses and programming into projects, as well as requirements to ensure that as new public spaces are designed and constructed, they are able to accommodate a variety of programming options, from the occasional festival to the space for quiet relaxation and reflection. Section 7.7.1 establishes detailed urban design guidelines many of which are geared toward enhancing the pedestrian experience by requiring, among other things, the preservation of existing view corridors, the creation of new view corridors and that building mass be divided vertically to establish a pedestrian-scale.

The provisions of this Municipal Harbor Plan meet or exceed the requirements of the Waterways Regulations in the extent to which they promote public use and enjoyment of the South Boston Waterfront to a degree that is fully commensurate with the public's rights in the tidelands, as provided in 310 CMR 9.53.

	Waterways Regulations	Substitutions	Offsets
60 Necco Court			
(a) Water-Dependent Use Zone	25 feet.	12 feet, in order to accommodate Harborwalk.	Contribution to the South Boston Waterfront Account of the Parks Fund: <ul style="list-style-type: none"> • \$75 per square foot (one-time). • \$2 per square foot (annual).
(b) Lot Coverage	Lot area not included in building footprint must be open space for public recreation.	More than 50% lot coverage ratio in consultation with the BRA design review staff during the Article 80 review process.	Contribution to the South Boston Waterfront Account of the Parks Fund proportionate to the increase in lot coverage ratio.
(c) Open Space	Lot coverage ratio for nonwater-dependent uses is 50%.	To the extent that the build out of this parcel results in greater than 50% lot coverage, there is a corresponding loss in the amount of open space for public recreation.	Contribution to the Parks Fund sufficient to design, construct, and maintain first class urban park space: <ul style="list-style-type: none"> • \$75 per square foot (one-time). • \$2 per square foot (annual).
(d) Building Height	55 feet. See Figure 11-2.	80 feet. See Figure 11-3.	<ul style="list-style-type: none"> • <i>Rooftop Viewing Area and Four-Season Room</i> • <i>Civic, Cultural or Educational Facility</i> • <i>Water Transit Subsidy or Service</i> • <i>Public Water-Related Facilities</i>

	Waterways Regulations	Substitutions	Offsets
Fort Point Historic Subdistrict South	55 feet height limit near the water to 330 feet along A Street. See Figure 11-2.	Maximum of 150 feet height limit north of the mall area; limited to 100 feet south of the mall, sloping downward as buildings approach the South Boston neighborhood. 75-foot street wall along the Channel. See Figure 11-3.	Quantitative Offsets: <ul style="list-style-type: none"> • <i>Lower Heights in the Development Site (Required Offset).</i> • <i>Additional Open Space (Required Offset).</i> • <i>Four-Season Room.</i> • <i>Civic, Cultural or Educational Facilities.</i> • <i>Upper Floor Facilities of Public Accommodation.</i> Qualitative Offsets: <ul style="list-style-type: none"> • <i>Water Transportation Subsidy or Service.</i> • <i>Other Public Water-Related Facilities.</i>

Fort Point Historic Subdistrict Substitution Chart

	Waterways Regulations	Substitutions	Offsets
Fort Point Historic Subdistrict North			
(a) Lot Coverage	Nonwater-dependent uses may not exceed a 50% coverage ratio.	More than 50% lot coverage ratio permitted to be determined through the Article 80 review process.	Contribution to South Boston Waterfront Account of the Parks Fund proportionate to increase in lot coverage ratio.
(b) Open Space	Lot area not included in building footprint must be open space for public recreation.	To the extent that the build out of this parcel results in greater than 50% lot coverage, there is a corresponding loss in the amount of open space for public recreation.	<p>Contribution to the Parks Fund sufficient to design, construct, and maintain first class urban park space:</p> <ul style="list-style-type: none"> • \$75 per square foot (one-time). • \$2 per square foot (annual).
(c) Height (Parcel E on Sleeper Street Only)	55 to approximately 85 feet (Parcel E). See Figure 10-5.	75 feet (Parcel E). See Figure 10-6.	<ul style="list-style-type: none"> • <i>Rooftop Viewing Area and Four-Season Room</i> • <i>Civic, Cultural or Educational Facility</i> • <i>Water Transit Subsidy or Service</i> • <i>Other Public Water-Related Facilities</i>

12.0 FORT POINT INDUSTRIAL SUBDISTRICT

The Fort Point Industrial Subdistrict, located along the Fort Point Channel south of the Fort Point Historic Subdistrict, contains approximately 67 acres of land, approximately 84% of which is within Chapter 91 jurisdiction. See Figure 12-1. The area is occupied by Gillette Manufacturing USA, the United States Postal Service, and several smaller industrial users. The subdistrict also contains approximately 3200 linear feet of waterfront along Fort Point Channel.

The area is fairly well built out at the present time, with the area's existing structures occupied by several industrial users. Gillette, the City's largest industrial employer, employs some 5,000 workers in three shifts at this facility, producing more razors than any other factory in the world. Court Square Press and RCN also operate facilities in this subdistrict. Until recently, the United States Postal Service operated a vehicle maintenance facility on A Street. The structure was recently demolished.

12.1 PLANNING OBJECTIVES FOR THE FORT POINT INDUSTRIAL SUBDISTRICT

The Fort Point Industrial Subdistrict represents one of a very few industrial enclaves in the City, waterfront or otherwise. The City is committed not only to maintaining these existing enclaves and the jobs that they provide to Boston residents, but also to providing support for them as well. The public currently has no access to the subdistrict's waterfront on the Fort Point Channel. The City also is committed to providing safe pedestrian access along the entire length of the Channel that does not impinge upon existing industrial users.

- **Promote Access to Boston Harbor as a Shared Natural Resource**

The Fort Point Industrial Subdistrict currently offers little in the way of public access to the Fort Point Channel, but the subdistrict can provide public waterfront access and contribute to the activation of the Channel without interference with existing industrial operations on the land side. As a result of CA/T Project mitigation commitments, Harborwalk will be completed throughout much of the Channel. In this subdistrict, the CA/T Project will construct a new pile-supported Harborwalk from the reconstructed Dorchester Avenue Bridge the full length of the Gillette property. When the CA/T Project mitigation commitments are built out, the waterfronts of the Fort Point Industrial Subdistrict and the Fort Point Historic Subdistrict will be 100% publicly-accessible.

- **Preserve and Enhance the Industrial Port**

The Fort Point Industrial Subdistrict depends upon good truck access to and from the City's highway system. The construction of the South Boston Bypass Road, the Massport Haul Road, a truck ramp from I-90 into the South Boston interchange and a midpoint

access to the Bypass Road are specific improvements dedicated to improving truck access to and from the waterfront.

- **Plan the District as a Vital, Mixed-Use Neighborhood**

Although a broad mix of uses is planned for the South Boston Waterfront, the same mix of uses is not appropriate for each subdistrict. The Fort Point Industrial Subdistrict already has a strong mix of industrial users that the City would like to see expanded. The City would like to attract additional light manufacturing and possibly technology users to build out this subdistrict and expand the City's industrial base. The Public Realm Plan's goal of including a high percentage of new residential uses to the north in the adjacent Fort Point Historic Subdistrict has given rise to concerns regarding the compatibility of existing uses in this subdistrict with these proposed uses. Strategies for addressing possible compatibility issues are discussed below.

- **Develop the District as an Integral Part of Boston's Economy**

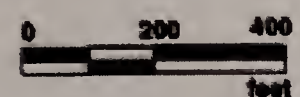
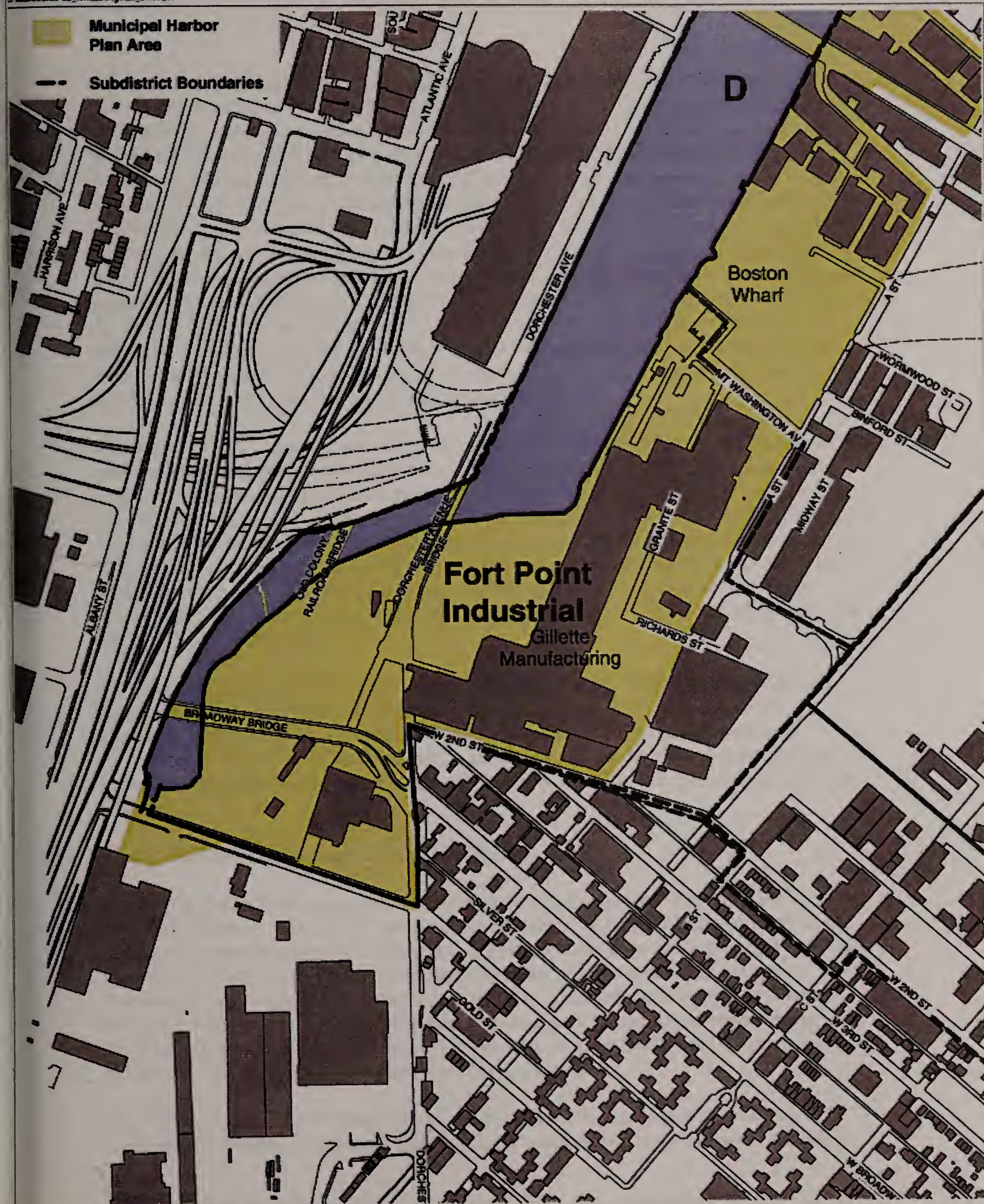
The Fort Point Industrial Subdistrict, together with the industrial port areas, already provides a large percentage of the remaining industrial jobs within the City's boundary. Gillette alone employs approximately 5,000 people, many of whom are Boston residents. The City is cognizant of the importance of the industrial sector to the strength of the City's economy is committed to protecting existing users and providing adequate expansion space as may be necessary.

12.2 PLANNING STRATEGIES FOR THE FORT POINT INDUSTRIAL SUBDISTRICT

The City's strategy for implementing the Public Realm Plan in the Fort Point Industrial District reflects a concern for existing users and for resolving possible tensions between existing and future industrial users in this subdistrict with residential uses planned for the Fort Point Historic Subdistrict to the north. The BRA is aware of no expansion plans of existing users or plans involving new users that would require substitutions from the Waterways Regulations. Accordingly, no substitutions are proposed for this subdistrict.

12.2.1 Compatibility of Existing and Proposed Uses

Important to the overall development of the South Boston Waterfront will be a significant density of residential uses. Equally important is the protection of existing industrial uses throughout the district. The Public Realm Plan's identification of the Fort Point Historic Subdistrict as a residential mixed-use area which will place residential uses in the subdistrict immediately to the north has raised concerns regarding the compatibility of these proposed uses with existing industrial uses.



**FIGURE 12 - 1. FORT POINT
INDUSTRIAL SUBDISTRICT
Municipal Harbor Plan Area**

The intent of the designation “residential mixed-use” is to create a new neighborhood in the Fort Point Historic District. In order to be successful, neighborhoods require a mix of uses, including utilities, parking, police and fire, neighborhood retail and offices, all of which will function well as buffer uses. In addition, both the Fort Point Historic Subdistrict and the Fort Point Industrial Subdistrict are located adjacent to the site of the new convention center, an excellent location for the myriad of small businesses that will support the operations of the convention center. Other possible buffer uses compatible with residential and industrial uses include light manufacturing and technology-related uses. Whether these buffer uses are located in mixed-use structures that include residential units on the upper floors or in structures by themselves will depend upon the proximity of the new structures to existing industrial uses. By carefully targeting the location of appropriate buffer uses along the borders of the Fort Point Industrial Subdistrict and the Fort Point Historic Subdistrict, as well as along the Haul Road, we can provide much needed housing and protect existing industrial uses.

Urban design also offers some strategies for addressing compatibility issues. The layout of new buildings and streets should follow a few guidelines that accommodate pedestrians without compromising any industrial activities. New streets and buildings should be aligned with and extend existing streets and view corridors to allow views to the Channel. Sidewalks should be provided on both sides of all streets. Building walls should be located as much as possible along the backs of sidewalks to avoid ill-defined front and side yards. Similarly, surface parking and other open areas should be defined with walls at street edges. Loading and service functions should take place off street so to minimize curb cuts and pedestrian interruption.

Existing pedestrian paths and streets to the Channel along Mt. Washington Avenue and Dorchester Avenue should be kept clear of structures, while new paths should be introduced where they do not interfere with commercial or industrial operations or jeopardize public safety. Where possible, open spaces that can be located at the ends of these view corridors would be welcome additional opportunities for the public to enjoy the Channel.

12.2.2 Maintaining Existing Water Conditions

The Public Realm Plan envisions a variety of new water-dependent structures and uses for Fort Point Channel. The Fort Point Industrial Subdistrict is home to water-dependent and nonwater-dependent industrial users alike. Gillette, a water-dependent industrial user, uses the waters of Fort Point Channel in its manufacturing processes and depends upon maintaining water quality within certain parameters. Concerns have been raised as to whether the proposed uses for the Channel would negatively impact the water quality of the Channel waters or the Massachusetts Water Resource Authority’s (MWRA) program to reduce combined sewer overflow into Fort Point Channel.

The Fort Point Channel Working Group, a sub-group of the Municipal Harbor Plan Advisory Committee, currently is studying many issues relating to Fort Point Channel in

order to develop a public activation plan for the Channel. These issues include existing conditions, including both water quality and sediment; possible new watershed uses and structures and their impacts on the Channel's waters and the Channel bed; and strategies for implementing the plan that addresses both financing and regulatory issues. It is not our intent that new uses or structures in the Channel should impair the Channel's flushing capacity, interfere with the MWRA's program or degrade water quality.

Article 80 of the Boston Zoning Code establishes a comprehensive process for review and approval by the BRA of various types of development projects throughout the City. The purpose of Large Project Review is to assess a project's impacts on its surroundings and on City resources and to identify necessary mitigation measures. One of the components of Article 80 review is to assess a project's impacts on the environment, including the water quality of Boston Harbor or other affected water bodies. The state's MEPA regulations also require study of a proposed project's impacts to area water bodies. Article 80 and MEPA also both offer other City and state agencies, such as the Boston Water and Sewer Commission and the MWRA, the opportunity to comment on proposed projects. These processes enable us to identify possible impacts to the water quality in Fort Point Channel of a proposed project early in the development review process, and address these impacts through mitigation or other measures, as may be appropriate.

13.0 TEN-YEAR EFFECTIVE PERIOD

In addition to the flexibility offered by the substitutions of the use and density provisions of the Waterways Regulations, the BRA would like to extend the period of effectiveness for this Municipal Harbor Plan. The MHP Regulations currently provide that a Municipal Harbor Plan is effective for five years. The BRA requests that the City's Municipal Harbor Plans, including this one, remain in effect for ten years.

In the last forty years, the City has undertaken to build out or revitalize several large tracts of undeveloped or underutilized land, including the Charlestown Navy Yard and the Downtown Waterfront. Build-outs on this scale can take several decades and business cycles to complete. The build-out of the South Boston Waterfront District is expected to take a similar amount of time.

The Public Realm Plan is very much a long range plan, with components that are not expected to become a reality for ten, fifteen or twenty years or more. In the case of the South Boston Waterfront District, we are using the Municipal Harbor Plan to implement a long range vision. Of course, it is important to take stock at various intervals. Ten years is, more or less, one-half of a growth period, and an appropriate time to be reviewing where we are and what significant changes may be required to the existing plan. The amendment provisions already provide a mechanism for addressing substantial changes during the period of a plan's effectiveness.

The Municipal Harbor Plan process, while extremely useful, can take a significant amount of time to complete. Moreover, harbor plans typically are more long-range documents than the current five-year period would suggest. Accordingly, we propose that this Municipal Harbor Plan, as well as others filed by the City of Boston, remain in effect for a period of ten years.

14.0 IMPLEMENTATION OF THE PUBLIC REALM PLAN

Once this Municipal Harbor Plan is approved, a zoning amendment will be drafted. The Public Realm Plan is the City's blueprint for the South Boston Waterfront. This chapter is a discussion of the tools that the City has at its disposal to implement the Public Realm Plan and the City's planning policies for the South Boston Waterfront that are expressed in the Public Realm Plan. This Municipal Harbor Plan is one of the City's implementation mechanisms for those portions of the South Boston Waterfront that are within Chapter 91 jurisdiction. As in all other parts of the City, the Boston Zoning Code (BZC) will be the primary mechanism to guide and regulate private development in accordance with the Public Realm Plan.

Once this Municipal Harbor Plan is approved, a zoning amendment will be drafted to codify the recommended use and dimensional regulations. The proposed zoning amendment must be authorized by the BRA Board for recommendation to the Zoning Commission. These steps require a public hearing. The proposed zoning amendment also requires the approval of the Zoning Commission after a public hearing, followed by the signature of the Mayor. In the interim, in order to protect the South Boston Waterfront from development that may be inconsistent with the goals of the Public Realm Plan, the South Boston Waterfront Interim Planning Overlay District (South Boston Waterfront IPOD) (BZC Article 27P) was established. The purpose of an Interim Planning Overlay District (IPOD) is to allow development to go forward while permanent zoning is developed and finalized. A copy of the South Boston Waterfront IPOD is included in Appendix 6.

The South Boston Waterfront IPOD sets out land use objectives for each of the subdistricts of the South Boston Waterfront and establishes temporary zoning controls for the area. The South Boston Waterfront IPOD addresses many, although not all, of the areas to be addressed by permanent zoning. Proposed projects may go forward before permanent zoning is adopted only if they obtain an IPOD permit. In the South Boston Waterfront, the City of Boston's Board of Appeal will issue an IPOD permit only if it finds that (a) the benefits to the community outweigh the burdens imposed; and (b) the proposed project is in substantial accord with the IPOD and the Public Realm Plan. In this way, development in the South Boston Waterfront can proceed, but only if it is in accordance with the City's vision for the area.

The South Boston Waterfront Zoning Amendment will, when adopted, establish new zoning for those portions of the South Boston Waterfront not located in the Boston Marine Industrial Park or the Designated Port Area, including the MHP Area. In addition to establishing use and dimensional regulations, the new zoning also will regulate a number of other aspects of development. General urban design guidelines for the South Boston Waterfront designed to foster the urban character particular to each area were established in the Public Realm Plan. A formal set of design guidelines will be adopted as part of the final zoning. In the interim, the general guidelines from the Public Realm Plan are incorporated by reference in the IPOD. Permanent zoning also will establish those areas or

sites where Planned Development Areas (PDAs) are allowed. A PDA is a special type of zoning overlay district that allows for a more comprehensive balancing of the impacts and benefits of a project.

The Waterways Regulations give a municipality the opportunity to determine whether a waterfront project which is nonwater-dependent serves a proper public purpose (Section 18 Determination). Detailed criteria to be evaluated by the BRA in making a Section 18 Determination with respect to new nonwater-dependent use projects located in the MHP Area are included in Section 7.1 of this Municipal Harbor Plan and will be codified in new zoning for the area.

Finally, the City's extensive development review process found in Article 80 of the BZC provides the City with a framework and mechanism for evaluating the impacts of a project, including transportation, environmental protection, urban design, historic resources and infrastructure systems. The Article 80 process includes opportunities for public comment and participation throughout.

14.1 PERMANENT ZONING – USE AND DENSITY REGULATIONS

Permanent zoning for the South Boston Waterfront will establish use and density regulations for the area designed to provide for development of the waterfront that is compatible with the public's rights of access and the characteristics of the particular district or subdistrict. To protect the South Boston Waterfront from inappropriate development pending the completion of final zoning, the IPOD establishes temporary density and use restrictions. The definitions of capitalized terms included in this section which are not defined below may be found in the definitions section of the IPOD (Section 27P-3) or in BZC Article 2A (Definitions Applicable in Neighborhood Districts and in Article 80).

14.1.1 Open Space

New zoning will specify the percentage of open space that must be included in a proposed development project to meet the Public Realm Plan's open space scheme. In the interim, the IPOD establishes a 50% Open Space requirement for all proposed projects involving new construction at grade. Only Proposed Projects involving water-dependent uses with a gross floor areas of 2,500 square feet or less are exempt from this requirement. Open Space is defined as land areas and areas on Piers, excluding (a) any areas occupied by a building or roofed structure; (b) any parking lot or parking area; (c) any street; (d) any private road or area devoted to motor vehicle use; (e) any salt-water area below the mean high tide line, other than areas on Piers; (f) any fresh water area more than ten (10) feet from the shoreline; (g) marina slips or floats or other floating structures; (h) swimming pools and (i) tennis courts. See BZC Section 27P-12.

14.1.2 Setbacks from the Water (Waterfront Yard Area)

To preserve areas immediately adjacent to the shoreline for Public Access Facilities, such as Harborwalk, and for Water-Dependent Uses, permanent zoning will require the establishment of Waterfront Yard Areas – essentially a waterfront setback requirement. The IPOD establishes a temporary requirement for Waterfront Yard Areas for the portion of any Lot adjacent to and landward of the High Tide Line and along the edges of a Pier. Throughout the South Boston Waterfront, the depth of the required Waterfront Yard Area from the sides of Piers is 12, and from the shoreline and Ends of Piers, the depth of the required Waterfront Yard Area is 50 feet, unless the BRA determines pursuant to Large Project Review or Small Project Review, as applicable, that a setback of less than 50 feet is necessary to accommodate existing buildings or other conditions on the Lot and will provide adequately for a continuous path along the waterfront. No portion of any building or structure may be located in the Waterfront Yard Area, except walkways, landscape furniture, guardrails, pilings, boat ramps and other structures which do not materially interfere with pedestrian use of the Waterfront Yard Area or which are required for operational or safety reasons, provided that any resulting interference with pedestrian use of the Waterfront Yard Area is minimized to the extent economically practicable. Structures for Water-Dependent Uses are permitted within a Waterfront Yard Area as necessary to avoid interference with any direct access to the water such Water-Dependent Use may require. No portion of a Waterfront Yard Area may be located on a floating structure.

14.1.3 Height

Existing heights along the developed portions of the Boston Harbor waterfront range from forty-story towers to one- and two- story residential and industrial buildings. New zoning will establish the maximum allowable heights for the South Boston Waterfront which will range from 55 feet to 150 feet as-of-right. A limited number of sites will be able to achieve higher heights subject to an approved PDA development plan that will balance height with public benefits. The IPOD establishes interim height controls ranging from 35 feet to a maximum of 150 feet. BZC Article 27P-9.

14.1.4 Floor Area Ratio

This section will establish the maximum allowable floor area ratios (FAR) for the South Boston Waterfront. As-of-right FARs will be specified as well as whether additional density will be allowed through a PDA process. The IPOD establishes temporary density controls in BZC Article 27P- 9.

14.1.5 Use Regulations

Permanent zoning will establish those uses that are allowed as-of-right, conditional and forbidden in the South Boston Waterfront. In addition, requirements for residential uses,

including affordability requirements, and uses that will be permitted or required on the ground floor to create activity at street level, will be specified.

The Public Realm Plan envisions the creation of an active, 24-hour neighborhood. Providing housing in and around the waterfront is a priority of both this Municipal Harbor Plan and Boston zoning policy. Permanent zoning contain mechanisms to ensure that the affordability goals of the Public Realm Plan are achieved. These mechanisms may include the inclusion of on-site affordable housing units in new residential developments as well as the creation of affordable units off-site.

To ease the tension between private residential and office uses and public access to the waterfront, like this Municipal Harbor Plan, the BZC will require the inclusion of interior Facilities of Public Accommodation in the South Boston Waterfront District. Facilities of Public Accommodation are facilities at which goods or services are made available directly to the general public, such as restaurants, theaters, hotel lobbies, libraries, museums, community centers, retail stores, health clubs, day care facilities, recreational boating facilities and interior water transportation facilities. In the Harborpark Districts, for any Proposed Project with a gross floor area of 10,000 or more square feet involving new construction or change in use of the first story, 40% of the first floor must be devoted to interior Facilities of Public Accommodation. For the South Boston Waterfront District, the requirement will be 100%.

14.2 PERMANENT ZONING - URBAN DESIGN GUIDELINES

Urban design has the power to invite and the power to discourage. The urban design of the waterfront is extraordinarily important to the creation of a vital, accessible area. It is the initial view of the water, often from blocks away and framed by buildings, that draws people to its edge. To ensure that, the Boston waterfront both welcomes and is accessible to all, permanent zoning will include detailed urban design guidelines to be applied in the Article 80 process.

New urban design guidelines will address, among other things, building scale and character, public spaces, the street environment, sustainability and universal accessibility, through-block connections and interior public spaces and parking and loading. The Public Realm Plan established the following general objectives as the basis for the guidelines:

- To protect and enhance Fort Point Channel – the proposed center of activity in the South Boston Waterfront – and the adjacent late 19th and early 20th Century industrial, commercial and civic buildings between new Northern Avenue and Gillette.
- To ensure that new commercial, residential, hotel, retail, open space and civic development in Fan Pier, the Piers, the convention center and the Enhancement Zone effectively activates and enhances the network of new parks, civic spaces and uses, squares, walkways and shopping streets, and vice versa.

- To provide a substantial number of housing units that will create a residential environment welcoming to families and individuals.
- To create a high quality urban design character for the emerging South Boston Waterfront.

The Public Realm Plan also established preliminary general guidelines for the subdistricts which will be expanded to accompany final zoning. The preliminary guidelines are included in Section 7.7 and incorporated by reference into the South Boston Waterfront IPOD and will be applied to new projects pending the completion of permanent zoning.

14.3 PERMANENT ZONING - SECTION 18 DETERMINATION

For all projects on tidelands, except for water-dependent use projects located on private tidelands, Chapter 91 and the Waterways Regulations require the DEP to make a determination that a project serves a proper public purpose. G.L. c.91, §18; 310 CMR 9.31(2). The Waterways Regulations also give a municipality the opportunity to make a Section 18 Determination, that is, submit a written recommendation to the DEP stating whether the municipality believes the project serves a proper public purpose and is not detrimental to the public's rights in the tidelands. 310 CMR 9.13(5).

The City has developed a comprehensive list of factors to be considered in making this determination. They are included in Section 7.1 of this Municipal Harbor Plan. The Section 18 criteria require the BRA to evaluate a project in terms of how well it preserves and enhances the public's rights in the tidelands, including visual and physical access to the water, interest in historic preservation, interest in industrial and commercial waterborne transportation of goods and persons, interest in repair and rehabilitation of dilapidated piers and interest in safe and convenient navigation in Boston Harbor. Other criteria address compliance with the baseline standards and guidelines and substitution standards established by the Municipal Harbor Plan.

Permanent zoning for the South Boston Waterfront will codify these criteria. The South Boston Waterfront IPOD contains interim standards to be applied to proposed waterfront projects until new zoning is adopted. *BZC Section 27P-15.*

14.4 PERMANENT ZONING - PLANNED DEVELOPMENT AREAS

Permanent zoning will establish those areas or sites where PDAs may be allowed. A PDA is a special type of zoning overlay district that allows for a more comprehensive balancing of the impacts and benefits of a project. PDAs provide for both greater flexibility and additional controls for project development. PDAs are approved only after an extensive

public review process that ensures that the PDA plan conforms to the principles of the Public Realm Plan and offers substantial public benefits.

A PDA may be established for an area of at least one acre and requires the approval of a PDA development plan or a PDA master plan. *BZC Section 3-1A.a, 80C-3*. A PDA development plan must include a description of the proposed location and appearance of structures, open spaces and landscaping, uses, densities, traffic circulation, parking and loading facilities, access to public transportation, dimensions of structures and such other matters as the BRA may require. If the site includes at least five acres and is not located in a residential district, a PDA master plan may be submitted. A PDA master plan must include a statement of the development concept, including the planning objectives and character of the development, the proposed uses of the area, the range of dimensional requirements contemplated for each of the proposed uses, the proposed phasing of construction of the development, and such other matters as the BRA may require. *BZC Article 80C-3*.

In order to approve a PDA development plan or a PDA master plan, the BRA must find: (a) such plan is not for a location or proposed project for which PDAs are forbidden by the underlying zoning; (b) each proposed project in the PDA complies with any provisions of the underlying zoning that establish use, dimensional, design or other requirements for proposed projects in PDAs; (c) the PDA complies with any provisions of the underlying zoning that establish planning and development criteria, including public benefits, for PDAs; (d) the PDA conforms to the plan for the district, subdistrict, or similar geographic area in which the PDA is located, and to the general plan for the City as a whole; and (e) on balance, nothing in such plan will be injurious to the neighborhood or otherwise detrimental to the public welfare, weighing all the benefits and burdens.

In addition to establishing where PDAs will be permitted in the South Boston Waterfront, zoning will establish the specific criteria to be applied to PDAs in the area, including the type of public benefits that will be required. This provides an opportunity to include specific requirements that ensure the provision of new benefits will enhance and promote the waterfront or activate the watershed such as piers and floating structures, civic structures and public art.

The IPOD establishes temporary requirements for PDAs in the South Boston Waterfront, including the areas in which PDAs are allowed. The IPOD permits PDAs in the Inner Harbor and in that portion of the Industrial South Boston Subdistrict bounded by Summer Street, D Street, the extension of the Haul Road and Pumphouse Road, requires consistency with the Public Realm Plan and establishes criteria for public benefit plans. A PDA plan must propose a plan for public benefits, consistent with the goals of the Public Realm Plan, including one or more of the following: (a) the expansion of the waterfront economy, including the creation of new permanent jobs or the retention of jobs that otherwise would be lost; (b) the creation of new community housing opportunities; (c) the enhancement or support of community facilities or programs; or (d) the enhancement of the public realm, including the provision or substantial improvement of waterfront public

facilities and the Harborwalk, the provision of accessible public open space, or the activation of the watersheet.

14.5 BOSTON ZONING CODE ARTICLE 80

Article 80 of the Boston Zoning Code establishes a comprehensive process for review and approval by the BRA of various types of development projects throughout the City. Large Project Review provides a procedure for the review of large development projects before and during the schematic design stage. *See generally BZC Section 80B-1 - 80B-6.* Small Project Review establishes a procedure for BRA staff review of projects that are too small to require Large Project Review but may nonetheless have significant physical or visual effects on their surrounding.

14.5.1 Large Project Review

The review process involves three stages: scoping, draft and final. Each of these stages includes a required public comment period. In addition, the BRA must invite other City agencies (and may invite other public agencies) to participate in a joint scoping session before the BRA. Article 80 also authorizes the BRA to coordinate Large Project Review with any other review to which a project may be subject, including the Commonwealth's Chapter 91 licensing and MEPA review procedures.

Different neighborhoods have different thresholds for when Large Project Review will apply. The Harborpark Zoning Districts have a lower threshold for Large Project Review than for any other location in the City. The IPOD has incorporated the Harborpark threshold for projects located in the South Boston Waterfront. Accordingly, Large Project Review applies to any project:

- to erect a building or structure having a gross floor area of 10,000 or more square feet;
- to enlarge or extend a building or structure so as to increase its gross floor area by 10,000 or more square feet;
- to establish or change the uses of 50,000 or more square feet of gross floor area;
- to construct, demolish, or alter any Pier, or to alter any shoreline, which construction, demolition or alteration affects 1,000 or more square feet of lot area; or
- to substantially rehabilitate a building or structure having, or to have after rehabilitation, a gross floor area of more than 100,000 square feet.

The purpose of Large Project Review is to assess a project's impacts on its surroundings and on City resources and to identify necessary mitigation measures. There are eight separate components of Large Project Review: (1) transportation; (2) environmental protection; (3) urban design; (4) historic resources; (5) infrastructure systems; (6) site plan; (7) tidelands and (8) Development Impact Projects. The BRA's determination of the

adequacy of a project's impact analysis and mitigation proposals is subject to a vote of the BRA's board at a public meeting. No permit may be issued for a project before the project proponent has entered into a cooperation agreement with the BRA to enforce the mitigation measures.

- **Transportation.** For projects with a gross floor area of 50,000 or more square feet, the applicant must submit a Transportation Access Plan that analyzes the project's impacts on the City's transportation network. The analysis must encompass both the construction phase and post-construction phase, and propose measures to mitigate, limit or minimize any adverse impacts. The Transportation Access Plan may be required to contain any one or more of the following elements: traffic management, parking management, construction management and provisions for monitoring the effectiveness of any mitigation measures.
- **Environmental Protection.** The applicant also is required to conduct studies to determine the direct or indirect damage to the environment reasonably attributable to the project and propose appropriate mitigation and design measures. Elements for which environmental studies and mitigation measures may be required include: wind, shadow, daylight, solar glare, air quality, water quality, flood hazard districts/wetlands, groundwater, geotechnical impact, solid and hazardous wastes, noise, construction impact, rodent control and wildlife habitat.
- **Urban Design.** For the urban design component, the applicant must submit such plans, drawings and specifications as are necessary for the BRA to determine that the project: (a) is architecturally compatible with surrounding structures; (b) exhibits an architectural concept that enhances the urban design features of the subdistrict in which it is located; (c) augments the quality of the pedestrian environment; and (d) is consistent with any established design guidelines that exist for the areas in which the project is located. The general guidelines established in the Public Realm Plan will be applied until such time as expanded guidelines are developed.
- **Historic Resources.** The applicant must submit an analysis of any potential adverse effects that the project may have on the historic, architectural, archaeological or cultural resources of any structure or area listed in the State Register of Historic Places and propose measures to mitigate, limit or minimize these effects. The BRA may forward this component to other appropriate public agencies for their review and comment.
- **Infrastructure Systems.** The applicant must submit a description of the project's anticipated water and electricity consumption, sewage generation and energy requirements. The submission must include an evaluation of the project's impact on the capacity and adequacy of existing utilities and systems, including the need for any additional systems facilities.

- **Site Plan.** Site plan review is required only for projects that are located in a Conservation Protection Subdistrict or a Greenbelt Protection Overlay District. These designations were created to protect areas with significant natural features. The purpose of site plan review is to evaluate the project's impacts on these natural features. The applicant's site plan may be required to include a survey map showing the location of the natural features, photographs of their location and condition, a site plan showing the project, including planned grading, landscaping, streets, sidewalks, utilities and other planned features, a drainage and soil report, a proposed maintenance program for the significant natural features and any other information relating to their preservation and protection as the BRA may request.
- **Tidelands.** For any project that requires a Chapter 91 License, the applicant must submit an analysis of the project together with such plans, drawings and specifications as may be necessary for the BRA to determine that the project complies with the standards and requirements for a Section 18 Determination and other tidelands aspects of the underlying zoning provisions.

14.5.2 Development Impact Projects

A Development Impact Project is a project which (a) requires zoning relief, (b) will devote more than 100,000 square feet of gross floor area to Development Impact Uses (certain office, retail, service, institutional, educational and hotel or motel uses), or will result directly in a reduction in the supply of low-and moderate-income dwelling units; and (c) involves the creation or substantial rehabilitation of more than 100,000 square feet of floor area. An applicant must provide the BRA with the gross floor area measurement necessary for the BRA to calculate the Housing Exaction (\$5/square foot) and Jobs Contribution Exaction (\$1/square foot) for the project.

The Housing Exaction requirement is designed to mitigate the impacts of large-scale real estate development on the available supply of low and moderate income housing and increase the availability of such housing by requiring developers of Development Impact Projects to make a development impact payment to the Neighborhood Housing Trust, or to contribute to the creation of low and moderate income housing.

The Jobs Contribution Exaction is designed to provide jobs training for low and moderate income people to enable workers to compete for new nonmanufacturing jobs created by the displacement of the manufacturing sector by more profitable commercial uses. Developers must make a payment to the Neighborhood Jobs Trust or create or expand job training programs.

15.0 CONSISTENCY WITH COASTAL ZONE MANAGEMENT HARBOR PLANNING GUIDELINES, PROGRAM POLICIES AND MANAGEMENT PRINCIPLES

15.1 CONSISTENCY WITH COASTAL ZONE MANAGEMENT HARBOR PLANNING GUIDELINES

The MHP Regulations require a plan to be consistent with Coastal Zone Management (CZM) Harbor Planning Guidelines. CZM staff has indicated that the following four elements, which describe plan content, supplant the Harbor Planning Guidelines:

- A statement of goals and objectives and the corresponding applied policies to guide development in terms of its desired sequence, patterns, limits, and other characteristics;
- An implementation program;
- Planning analysis which takes into consideration technical data, community input, and other information which serves as the basis for evaluating tradeoffs among alternatives and choosing preferred courses of action; and
- A review of the public participation program.

The South Boston Waterfront Municipal Harbor Plan is consistent with the four elements described above. The goals and objectives of the Public Realm Plan and this Municipal Harbor Plan for the South Boston Waterfront and policies to guide its development are discussed generally in Chapter 8, and with reference to each subdistrict in Chapters 9, 10, 11 and 12. The implementation program is described in Chapter 14. A planning analysis is provided that describes not only the South Boston Waterfront but also the surrounding areas, providing a context and framework for the Municipal Harbor Plan. Public participation is discussed in Chapter 2.

15.2 CONSISTENCY WITH COASTAL ZONE MANAGEMENT PROGRAM POLICIES AND MANAGEMENT PRINCIPLES

The following section summarizes CZM's Program Policies and Management Principals. It describes why the South Boston Municipal Harbor Plan is consistent with each policy or principle or explains that the policy or principle is not applicable to the area affected by the Municipal Harbor Plan.

Water Quality Policy #1 - Ensure that point-source discharges in or affecting the coastal zone are consistent with federally-approved state effluent limitations and water quality standards.

The Massachusetts Water Resources Authority is the regional agency charged with improving water quality in Boston Harbor. In addition, through Large Project Review, the

City requires evaluation and mitigation of a proposed project's impacts on the water quality of Boston Harbor and any other affected water bodies.

Water Quality Policy #2 - Ensure that nonpoint pollution controls promote the attainment of state surface water quality standards in the coastal zone.

The environmental protection component of Large Project Review includes an evaluation and mitigation of a proposed project's impacts on water quality in Boston Harbor, including construction related run-off.

Water Quality Policy #3 - Ensure that activities in or affecting the coastal zone conform to applicable state requirements governing sub-surface waste discharge and sources of air and water pollution and protection of wetlands.

The environmental protection component of Large Project Review requires analysis and mitigation of a proposed project's impacts on air and water resources. The Scoping Determination for Large Project Review may require analysis of the project's impacts on, among other factors, air quality, water quality, wetlands, groundwater, and solid and hazardous wastes. The analysis and mitigation required by Large Project Review is coordinated with, but in addition to, the state's MEPA review.

Habitat Policy #1 - Protect wetland areas including salt marshes, shellfish beds, dunes, beaches, barrier beaches, salt ponds, eel grass beds, and freshwater wetlands for their role as natural habitats.

The MHP Area does not include or abut, and is not in close proximity to, the ecologically significant resource areas identified in this Policy. It is anticipated that ongoing Boston Harbor clean up will one day render shellfish from the Harbor safe for consumption. The environmental protection component of Large Project Review addresses a proposed development project's impacts on the water quality of Boston Harbor and other affected water bodies.

Habitat Policy #2 - Promote the restoration of degraded or former wetland resources in coastal areas and ensure that activities in coastal areas do not further wetland degradation but instead take advantage of opportunities to engage in wetland restoration.

Not applicable.

Protected Areas Policy #1 - Assure preservation, restoration and enhancement of complexes of coastal resources of regional or statewide significance through the Areas of Critical Environmental Concern (ACEC) Program.

The MHP Area does include complexes of coastal resources of regional or statewide significance.

Protected Areas Policy #2 - Protect state and locally designated scenic rivers and state classified scenic rivers in the coastal zone.

Not applicable.

Protected Areas Policy #3 - Review proposed developments in or near designated or registered historic districts or sites to ensure that the preservation intent is respected by federal, state and private activities and that potential adverse effects are minimized.

This Municipal Harbor Plan seeks to protect historic resources in the South Boston Waterfront area by respecting the existing historic structures and requiring new infill development to emulate the historic form of these structures. The Municipal Harbor Plan also indicates the City's preference for Harborwalk in the Fort Point Channel to be located, where possible, on existing fill in order to maintain the integrity of the historic seawalls. In addition, the historic resources component of Large Project Review requires review and mitigation of a project's impacts on historic districts. The BRA may invite the Boston Landmarks Commission and the Massachusetts Historical Commission to participate in the review process. In addition, Article 85 of the Boston Zoning Code establishes a separate procedure by which the Boston Landmarks Commission may delay the demolition of a significant building in order to examine the feasibility of alternatives.

Coastal Hazard Policy #1 - Preserve, protect, restore and enhance the beneficial functions of storm damage preservation and flood control provided by natural coastal landforms, such as dunes, beaches, barrier beaches, coastal banks, land subject to coastal storm flowage, salt marshes, and land under the ocean.

Not applicable. The MHP Area does not include or abut, and is not in close proximity to any of the natural coastal landforms identified in this Policy.

Coastal Hazard Policy #2 - Ensure construction in water bodies and contiguous land areas will minimize interference with water circulation and sediment transport. Approve permits for flood or erosion control projects only when it has been determined that there will be no significant adverse effects on the project site or adjacent or downcoast areas.

The environmental protection component of Large Project Review includes an examination of a proposed project's construction impacts and requires mitigation of any adverse impacts.

Coastal Hazard Policy #3 - Ensure that state and federally funded public works projects proposed for location within the coastal zone will:

- *not exacerbate existing hazards or damage natural buffers or other natural resources;*
- *be reasonably safe from flood and erosion related damage;*
- *not promote growth and development in hazard-prone or buffer areas, especially in Velocity zones and ACECs; and*
- *not be used on Coastal Barrier Resource Units for new or substantial reconstruction of structures in a manner inconsistent with the Coastal Barrier Resource/Improvement Acts.*

Portions of the MHP Area and abutting areas are in use for construction related to the CA/T Project and the Silver Line/Transitway. Mitigation programs were incorporated into each of these public works projects to address their potential impacts. Among other mitigation commitments, the CA/T Project will complete Harborwalk along much of the eastern edge of Fort Point Channel, and the MBTA will build out a new public park on the wharf adjacent to the Children's Museum.

Coastal Hazard Policy #4 - Prioritize public funds for acquisition of hazardous coastal areas for conservation or recreation use, and relocation of structures out of coastal high hazard areas, giving due consideration to the effects of coastal hazards at the location to the use and manageability of the area.

Not applicable.

Ports Policy #1 - Ensure that dredging and disposal of dredged material minimizes adverse effects on water quality, physical processes, marine productivity and public health.

Any new project will be required to obtain all applicable federal and state permits with respect to any proposed dredging.

Ports Policy #2 - Promote the widest possible public benefit from channel dredging, ensuring that designated ports and developed Harbors are given highest priority in the allocation of federal and state dredging funds. Ensure that this dredging is consistent with marine environmental policies.

No applicable.

Ports Policy #3 - Preserve and enhance the capacity of Designated Port Areas (DPAs) to accommodate water-dependent industrial uses, and prevent the exclusion of such uses from tidelands and any other DPA lands over which a state agency exerts control by virtue of ownership, regulatory authority or other legal jurisdiction.

This Municipal Harbor Plan does not include any areas located in a DPA or that are zoned Maritime Economy Reserve, a zoning designation for areas that are restricted to water-dependent industrial uses. The BRA recently completed a new Master Plan for the Boston Marine Industrial Park, which is located adjacent to the MHP Area. The Master Plan establishes a framework for future development within the Marine Industrial Park. A more detailed discussion of the Master Plan is contained in Section 6.1. In 1996, Massport and the BRA completed the joint Port of Boston Economic Development Plan. The objective of the Port Plan is make the port more competitive in the global marketplace and benefit all who live, work and visit Boston Harbor. A more detailed discussion of the Port Plan is contained in Section 6.2.

Ports Management Principle #1 - Encourage, through technical and financial assistance, expansion of water-dependent uses in designated ports and developed Harbors, redevelopment of urban waterfronts and expansion of visual access.

The purpose of this Municipal Harbor Plan is to ensure that the redevelopment of the South Boston Waterfront occurs in a manner that is consistent both with the City's plans for the area and the Commonwealth's tidelands policy objectives. A detailed discussion of these issues is contained in Chapters 7, 8, 9, 10, 11 and 12.

The BRA recently completed a new Master Plan for the Boston Marine Industrial Park, which is located adjacent to the MHP Area. The Master Plan establishes a framework for future development with the Marine Industrial Park. A more detailed discussion of the Master Plan is contained in Section 6.1. In 1996, Massport and the BRA completed the joint Port of Boston Economic Development Plan. The objective of the Port Plan is make the port more competitive in the global marketplace and benefit all who live, work and visit Boston Harbor. A more detailed discussion of the Port Plan is contained in Section 6.2.

Public Access Management Principle #1 - Improve public access to coastal recreation facilities and alleviate auto traffic and parking problems through improvements in public transportation. Link existing coastal recreation sites to each other or to nearby coastal inland facilities via trails for bicyclists, hikers, and equestrians and via rivers for boaters.

Chapters 7, 8, 9, 10, 11 and 12 contain extensive discussions addressing issues of increased public access and creating connections and links between the City's neighborhoods with cultural and educational facilities and recreation areas throughout the South Boston Waterfront.

The many infrastructure improvements in the area, such as the CA/T Project, the Silver Line/Transitway Project, the Southbay Harbor Trail, new public streets and additional Harborwalk segments, all will help to greatly increase access to the South Boston Waterfront.

Public Access Management Principle #2 - Increase capacity of existing recreation areas by facilitating multiple uses and by improving management, maintenance and public support facilities. Resolve conflicting uses whenever possible through improved management rather than through exclusion of uses.

Not applicable.

Public Access Management Principle #3 - Provide technical assistance to developers of private recreational facilities and sites that increase public access to the shoreline.

Chapters 7, 8, 9, 10, 11 and 12 contain extensive discussions addressing issues of increased public access, including establishing standards and guidelines for the development of open space and public space areas, including public recreation areas. Additional guidance is provided with respect to specific projects during the Article 80 review process.

Public Access Management Principle #4 - Expand existing recreation facilities and acquire and develop new public areas for coastal recreational activities. Give highest priority to expansions or new acquisitions in regions of high need or limited site availability. Assure that both transportation access and recreational facilities are compatible with social and environmental characteristics of surrounding communities.

Most of the new public recreational facilities in the MHP Area will be located on private land. Chapter 7 contains extensive requirements and guidelines regarding the development of open spaces and public spaces in the MHP Area to insure that public areas, both interior and exterior, not only *are* open and available for public use and enjoyment, but that they also *feel* truly public. Additional guidance is provided with respect to specific projects

during the Article 80 review process.

Energy Policy #1 - For coastally dependent energy facilities, consider siting in alternative coastal locations. For non-coastally dependent energy facilities, consider siting in areas outside of the coastal zone. Weigh the environmental and safety impacts of locating proposed energy facilities at alternative sites.

Not applicable.

Energy Management Principle #1 - Encourage energy conservation and the use of alternative sources such as solar and wind power in order to assist in meeting the energy needs of the Commonwealth.

Not applicable.

Ocean Resources Policy #1 - Support the development of environmentally sustainable aquaculture, both for commercial and enhancement (public shellfish stocking) purposes. Ensure that the review process regulating aquaculture facility sites (and access routes to those areas) protects ecologically significant resources (salt marshes, dunes, beaches, barrier beaches, and salt ponds) and minimizes adverse impacts upon the coastal and marine environment.

Not applicable.

Ocean Resources Policy #2 - Extraction of marine minerals will be considered in areas of state jurisdiction, except where prohibited by the Massachusetts Ocean Sanctuaries Act, where and when the protection of fisheries, air and marine water quality, marine resources, navigation and recreation can be assured.

Not applicable.

Ocean Resources Policy #3 - Accommodate offshore sand and gravel mining needs in areas and in ways that will not adversely affect shoreline areas due to alteration of wave direction and dynamics, marine resources and navigation. Mining of sand and gravel, when and where permitted, will be primarily for the purpose of beach nourishment.

Not applicable.

Growth Management Principle #1 - Encourage, through technical assistance and review of publicly funded development, compatibility of proposed development with local community character and scenic resources.

The City participates in the review of publicly-funded projects in a variety of ways and at a number of different levels to ensure compatibility with local community character and scenic resources. For example, City and BRA staff participate extensively in reviewing aspects of the CA/T Project. With respect to private development, the BRA's Article 80 process allows for a review of a project's impacts with respect to transportation, environmental protection, urban design, historic resources and infrastructure systems. This review process provides access for other agencies and private developers to the technical assistance of experienced BRA and other agency personnel in matching the design and planning goals of a proposed project with the policies and requirements of all applicable regulatory programs. Chapters 7, 8, 9, 10, 11 and 12 of this Municipal Harbor Plan also contain extensive guidelines and requirements designed to ensure that local community character and scenic resources are enhanced by new development.

Growth Management Principle #2 - Ensure that state and federally-funded transportation and wastewater projects primarily serve existing developed areas, assigning highest priority to projects that meet the needs of urban and community development centers.

Not applicable.

Growth Management Principle #3 - Encourage the revitalization and enhancement of existing development centers in the coastal zone through technical assistance and federal and state financial support for residential, commercial and industrial development.

One of the primary goals of this Municipal Harbor Plan is to promote redevelopment of portions of the South Boston Waterfront for new residential, commercial and light industrial uses, and to ensure that such redevelopment occurs in a manner that is consistent both with the City's plans for the area and the Commonwealth's tidelands policy objectives. A detailed discussion of these issues is contained in Chapters 7, 8, 9, 10, 11 and 12.

SOUTH BOSTON WATERFRONT DISTRICT MUNICIPAL HARBOR PLAN

ACKNOWLEDGEMENTS

The development of the Municipal Harbor Plan for the South Boston Waterfront District has been a collaborative effort. The Boston Redevelopment Authority would like to thank the following individuals and organizations who have contributed to the process and many other residents, advocacy groups and business representatives who have contributed their time toward this Municipal Harbor Plan. Many of your ideas and guidance are incorporated into this plan and it is a better plan because of your efforts.

THE MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

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Neighborhood Representatives:

East Boston

Ms. Karen Buttiglieri

Charlestown

Mr. Dennis Callahan

South Boston

Mr. Roderick Macdonald

Dorchester

Mr. Victor Campbell

South Boston Design Advisory Committee

Ms. Kathleen Kenneally

Ex Officio:

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Boston City Council

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Boston City Council

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Massachusetts State House

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Massachusetts State House

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Massachusetts State House

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Save the Harbor/Save the Bay
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City of Boston Office of Civil Rights
Stephen Spinetto, Commissioner for Persons with Disabilities

The Children's Museum
Louis Casagrande, President
Neil Gordon, Vice President of Finance and Administration

The New England Aquarium
Capt. H. Gregory Ketchen, Vice President of Operations

Roxbury YMCA
Harold Sparrow, Director

Artery Business Committee
Richard A. Dimino, President and CEO
Constance Bodurow, (Former) Manager of Urban Design & Planning

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National Park Service

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Appendix 1:

Minutes of Meetings of the Municipal Harbor Plan Advisory Committee

Appendix 1: Minutes of Meetings of the Municipal Harbor Plan Advisory Committee

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

May 17, 2000

Presentation by The McCourt Company

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in the BRA Board Room by Rod Macdonald.

Rod announced that the first item on the agenda was a presentation by The McCourt Company, and if time allowed we would then discuss revised Chapters 7, 8 and 9. Several handouts are available for committee and audience members: revised Chapters 7, 8 and 9; minutes from the last meeting; and today's agenda.

Presentation by The McCourt Company: Frank McCourt began the presentation by telling the committee that a project notification form was filed with the BRA on Monday, May 15. (Comments are due by 6/23.) The PNF includes two alternatives: Plan A and Plan B. He indicated that Plan A is compatible with the existing Fan Pier project, and Plan B reflects a fundamentally different view. He also indicated that the filing is with respect to McCourt property only. He noted that only a very small portion of the McCourt holdings were subject to Chapter 91 jurisdiction. Frank said that Plan B was a gesture – that by moving density back from the waterfront onto McCourt property, they had hoped to avoid litigation by the Conservation Law Foundation. He said that the gesture was pointless, since litigation by CLF seems inevitable.

Frank then highlighted the differences of the two plans. He said that the template for Plan A was the street grid, and the streets on Plan A line up with Fan Pier's streets. He indicated that Plan A has more private development and less public realm. He said that Plan B is fundamentally different. The template for development is open space and a civic network. Plan B has more public realm and less private development.

Plan B also includes a signature transit stop, while Plan A does not. He said that Plan A does not connect the T to the water, because if Plan A proceeds, the McCourt's proposal to extend the concourse of the T stop further along New Northern Avenue will not proceed, nor will the inverted pyramid headhouse. In Plan B, the T stop includes a substantially larger T stop concourse, a signature headhouse rotunda with a skylight, and a curved New Northern Avenue. He indicated that the trucking community did not have a problem with the curved street. He said that Plan B is consistent with agreements with the City, but not with the Pritzker's plan. Frank said that both plans step back from the water and concentrate density around the transit stop, but that Plan A complies with the MHP draft, while Plan B complies with Chapter 91.

Frank advised the committee that the ENF/PNF also includes a request for a Phase I waiver for Building D (east of T stop) under Plan B. If the waiver were granted by MEPA and the BRA, they would be able to proceed without the remainder of the plan. The BRA would start design review for this building. Dan Lynch asked why this particular building was selected. Frank responded that they took this route in order to meet the needs of a specific tenant.

Dan Lynch inquired regarding building heights in Plan A. From Sleeper Street to East Service Road, the heights and uses are: hotel/residential – 245'; office – 400'; office/residential – 390'; office – 375'; and office –

235'. Dan asked about the as-of-right height in this location. Howard Speicher, attorney for The McCourt Company, replied that the property is in a location in which PDAs are permitted, so there is no specific height requirement. When asked about uses in the two plans, Frank responded that Plan B includes one-third residential use, but that Plan A includes mostly office uses. The uses in Plan B, Sleeper Street to East Service Road are: hotel/residential; office/residential; office/residential; office; and office. Frank indicated that under Plan B, The McCourt Company also would pay for public improvements, including construction of New Northern Avenue, landscaping, and a signature T station for the area.

There was a discussion regarding the Omnibus Agreement. Frank referred the committee to a summary of the Agreement contained in the filing.

Rod Macdonald asked why the two options for development on McCourt property had been presented as an "either/or" situation – that is, do what we want on Fan Pier, or we will propose a development for our Northern Avenue parcels that is virtually all office space with heights ranging from 235 to 400 feet, little open space and severely curtailed public realm improvements. Isn't it fair to say that a much lower scale, less dense development could be accommodated? Frank responded that the ground rules had been changed. Other options are available, but these are the two they came up with.

Toni Pollak asked if they were ready to begin construction. Frank responded that they were, market permitting. Steve Spinetto asked about the FARs of the two proposals. Jamie Fay indicated that the FAR under Plan B was 5.4, and under Plan A was .12. Bruce Berman asked why the tidal pool was missing from Plan B. Jamie responded that the tidal pool could be accommodated under either plan. Bruce asked how much open space was on the McCourt property in Plan B. Frank responded that there is one-third open/civic space on McCourt property in Plan B. Valerie Burns commented that the most important place for open space is at the edge of the fan and the cove. The public green in plan A is less than $\frac{1}{4}$ the size of all Post Office Square, and the open space at the fan edge is an acre, which is $\frac{1}{2}$ the size of Post Office Square. Plan B is compelling because of the amount of open space. Under Plan B, the park at the fan edge is 4.6 acres – the size of the swanboat pond in the Public Garden.

Vivien asked what was meant by the reference to changing the rules. She inquired as to what rules this statement referred. Frank responded that it was a reference to all the rules – including the Chapter 91 rules and the Omnibus Agreement. Frank indicated that height was a red herring. If you cut off the heights of all the buildings in Plan A at 300', it doesn't change the plan, or the amount of open space.

A member of the audience indicated that he appreciated what The McCourt Company was trying to accomplish, and he inquired regarding the plans for the remaining McCourt holdings in the area. Frank indicated that Plan A and Plan are two different visions for the waterfront. When they read CLF's comments on the Fan Pier project, they realized that storm clouds were rising, and if they wanted to move forward in this business cycle, litigation by CLF could prevent that from happening. CLF and the BSA quantified the amount of development that they were comfortable with at 2 million square feet. To try to make them happen they offered 500,000 square feet of development to the Pritzkers without compensation.

Stephanie Pollack stated that the McCourt's Plan B was the first concrete development CLF had seen that embodies the principles of Chapter 91. CLF was not a co-developer of the project, and that there was no financial relationship between CLF and The McCourt Company. CLF had worked with the McCourts to develop Plan B. CLF has no position on Plan A at this time.

In closing, Frank asked the committee to consider which of the two plans reflects where they would want to live and work.

The meeting was adjourned at 5:00 p.m. The next meeting is Wednesday, May 24, 2000 at 3:00 p.m. in the BRA Board Room.

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

Ann Chiacchieri

From: JFay@fpa-inc.com
Sent: Thursday, June 01, 2000 12:50 PM
To: Ann.Chiacchieri.BRA@ci.boston.ma.us
Cc: doconnel@mccourtco.com
Subject: Minutes of MHP 5/17

Ann,
Could you make the following corrections in the minutes of the 5/17 meeting regarding the McCourt presentation?

(1) page 1 last paragraph, "If the waiver were granted by MEPA and the BRA, they would be able to move forward with Building D while completing review of the project as a whole."

(2) Page 2 , 4th paragraph, "Jamie Fay indicated that the FAR under Plan B was 4.7 and the Fan Pier FAR was around 5.4. Under Plan A, FAR was above 12 on a parcel by parcel basis. ."

Thank you for you consideration.
Jamie

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

May 10, 2000

BRA Massing Analysis

Additional Comments on Municipal Harbor Plan

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:20 in the BRA Board Room by Rod Macdonald.

Rod announced that the Fort Point Channel Working Group meeting scheduled for tomorrow had been cancelled and the next meeting will be on Thursday, June 1, 2000. The next South Boston Community Meeting is Wednesday, May 17, 2000 at 7 p.m. at the Tynan School. Several handouts are available for committee and audience members: revised Chapters 7, 8 and 9; minutes from the last meeting; today's agenda; and a copy of the Mayor's letter from last week regarding the Fan Pier project.

BRA Massing Analysis: Kairos Shen introduced the BRA's massing study of Fan Pier. He indicated that they had intended to show Pier 4 and the Fort Point Historic area as well, but these areas are not yet complete and will be presented at a later meeting.

Kairos reviewed the Chapter 91 heights for the Fan Pier. He then showed the BRA's buildout under the regulations, which he said totaled 3.19 million square feet of development space. He advised the committee that as they were working on the analysis, they learned that the increase from 3 million to 3.2 million square feet depends upon the distribution of uses. He then reviewed the criteria used in the analysis. The buildout shown maintains 50% open space as required by the Chapter 91 regulations. Floor heights were as follows: residential ground floors are 10 feet high, and upper floors are 9 feet high; commercial ground floors are 15 feet high and upper floors are 13 feet high. The build out maintains the view corridors of the Public Realm Plan. Each block is devoted to a single use. Although he considered incorporating vertical zoning into the buildout, this was not done, as it is very uncommon in Boston. The buildout also attempts to maintain the required 1/3 residential and 1/3 office ratios. The final numbers are slightly over on office use, which is at 38%. Hotel uses were 550,000 square feet (approx. 1/6 of buildout), and the remainder is residential. It is possible to obtain more than 3.2 million square feet of space if the amount of office is increased.

There was discussion as to whether the "stepping back" type of design was realistic. Kairos showed slides of the Hyatt and the Esplanade in Cambridge where a "stepping back" design was used.

There was discussion regarding the office floorplates in the study, which were approximately 49,000 square feet. Rod indicated that this seemed quite large and inquired regarding the demand for floorplates of this size. Kairos indicated that the large floorplates are suitable for back-of-office uses. Bennet Heart inquired whether it was realistic to put back of office uses on the Fan Pier. Kairos responded that large floorplates are in response the Chapter 91 regulations. It is the BRA's design criteria that is limiting towers to 25,000

square feet. Kyle Warkwick commented that there is a large demand for large floorplates for back-of-office uses, and pointed to the One Lincoln tower as an example, which has a floorplate of 48,000.

When viewing the BRA's study from the Old Northern Avenue side, Jamy Buchanan commented that Chapter 91 is no friend to the pedestrian experience from the street side. Kairos pointed out that a previous proposal for Fan Pier included parking in the building bases instead of underground, and indicated that it would really affect the Old Northern Avenue edge if it had parking instead of active uses.

Vivien Li inquired regarding the loss of the view corridors. Kairos responded that the purpose of the study was to maximize the Chapter 91 buildout. You can add height and use smaller bases to open up the views, but this is not Chapter 91. The study shows what it takes to achieve 3.19 and 3.4 million square feet of development space, and that it is not possible to achieve 3.6 million.

Astrid Glynn and Bennet inquired what would happen if you imposed the City's urban design guidelines on the picture. Kairos responded that Chapter 91 sets up arithmetic standards and that is what this study reflects. The BRA's design standards and Article 80 process take many other factors into account, and give us more flexibility. The situation becomes too dynamic too model. Bennet indicated that the Chapter 91 parameters are a maximum build out, but that it may be that an owner would have to build less if the impacts are too great. He said that he felt that it was misleading to suggest that this study could be built. Kairos responded that the discussion then shifts from shape and size to other issues. Bennet inquired about the ICA use. Ann responded that the ICA was an offset for substitute provisions, and that without the substitution, there is no requirement for an offset.

Brad Swing inquired regarding a wind analysis. Linda indicated that we had engaged Frank Durgin to do a qualitative wind analysis that should be complete soon.

Shirley Kressel asked how much housing was in the model. Kairos indicated that it included approximately 1 million square feet of housing. She asked whether the increased open space requested by the Mayor was reflected in the model. Kairos responded that the Mayor's request was outside Chapter 91, and that this model is based only on Chapter 91 parameters.

The discussion shifted to whether the Chapter 91 model reflected the Public Realm Plan. Linda indicated that the Public Realm Plan did not respect Chapter 91 – the Public Realm Plan was the City's concept for the area, but that it was not consistent with the Chapter 91 parameters. Shirley asked whether it was possible to study the Chapter 91 requirements in conjunction with the principles of the Public Realm Plan. Linda responded that such a study wasn't relevant because you are asking to take only part of the Public Realm Plan instead of all of it. Bennet said that the Fan Pier ENF required a Chapter 91 analysis with real buildings, view corridors, etc. Linda indicated that we are doing what the MHP Scope requires. Bennet asked if the Chapter 91 build out could include some of the principles of the Public Realm Plan. Linda responded that the Public Realm Plan is a complete set of principles -you are asking us to cut the density, which is one of the principles of the Public

Realm Plan, and use Chapter 91 instead. Jim Klocke indicated that the MHP appears to be headed to showing us a Public Realm build out.

Joy Conway asked if the purpose of the exercise was to show a maximum Chapter 91 build out. Kairos responded in the affirmative, and indicated that this was not a proposal of what we should build in the area. Rod asked the state if this study was what the state was looking for. Elizabeth Grob responded that the scope required a representative build out taking into account the City's principle of stepping back from the water.

Jim Doolin commented that what has been created is a de facto regulation that you can't build any more than the mass achievable under Chapter 91. He continued that if you move away from the Public Realm Plan, you essentially start from scratch. Shirley stated that substitutions shouldn't be just to make the Public Realm Plan happen, they should be to make Chapter 91 happen. Jim indicated that he disagreed. Chapter 91 is as much a process as a set of regulations. Richard Delaney responded that the spirit and intent of Chapter 91 must be respected and that a Municipal Harbor Plan is a different method of protecting the same rights and interests. Jamy indicated that the real question seems to be how much can we exact from a developer and still get the project built?

Jamy inquired regarding the 300 foot height limit and whether it could be changed. Rod responded that the heights were determined by FAA requirements and agreements made with the community.

Bennet referenced the recently completed Berger transportation study and asked Kairos if any thought had been given to where the additional 17 million square feet of development that the infrastructure will support would be located in the district. Kairos responded that the new infrastructure will support an additional 17 million square feet of development, which is in addition to the existing uses, such as the Boston Wharf area and the BMIP. He said they had studied the distribution of the first 18 million and the next 7 million, to get to the Public Realm Plan's 25 million build out. New density after the first 18 million requires more planning. He pointed out that in the last 40 years, the downtown had absorbed a total of 28 million square feet of new development.

Vivien asked about the process for reviewing the new Chapters. Rod indicated that we would use a large portion of the next meeting for comments on the new Chapters.

The meeting was adjourned at 5:00 p.m. The next meeting is Wednesday, May 17, 2000 at 3:00 p.m. in the BRA Board Room.

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

April 26, 2000

Fan Pier Update

Additional Comments on Municipal Harbor Plan

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:20 in the BRA Board Room by Rod Macdonald.

Rod announced that the MHPAC meeting scheduled for next week has been cancelled and the next meeting will be on Wednesday May 10, 2000 in the Piemonte Room (5th Floor City Hall). He noted that the City's massing analysis would be presented at the next meeting.

Fan Pier Update: Kyle Warwick began by announcing that the Fan Pier presentation would cover the changes in the Fan Pier proposal as submitted in the DEIR, a Chapter 91 analysis, and a question and answer period.

The new Fan Pier proposal changes the tidal area into a new park with three times as much green space (now 159,000 square feet) along the waterfront. It increases the square footage of the boardwalk, changes the fountain space to green space, decreases the heights of three buildings pursuant to the MHP height zones, creates additional residential space, and adds two public interior spaces. In the marina area, it eliminates seasonal slips by adding transient slips and orients water transportation closer to the public access. The proposal suggests that this area could become the gateway to the Harbor Islands. It includes two interior public spaces, one of which is Harbor Hall, a two-story 35 feet public room that connects the interior space to the exterior space. In addition, the plan proposes Courthouse Square as a public space with café seating and decreased mass. The plan adds residential artists' lofts on H and I blocks. To complement the ICA, which will incorporate a ground floor free public use, the proposal includes 60,000 square feet for an institutional/educational use.

Toni Pollak requested additional information on the specifics of this use and Kyle responded that current negotiations are with a school, but that discussions to date are confidential. He continued the presentation by providing comparisons of street widths and green space, using photographs of streets throughout the city to help the group visualize and conceptualize the proposed spaces. He also described how the proposal responds to submitted comments.

The proposal suggests that streets in the fan portion of the property could be closed for pedestrian/festival uses and can accommodate up to 18,790 people. Valerie Burns asked how they reached that number. Kyle responded that the architects use a formula that is based on per person square footage and total square footage. Kyle added that the proposal includes a floating movie screen on the Fan Pier Cove that can accommodate a viewership of 2,600 and which they hope to implement in the summer or fall. In addition, this summer Fan Pier cove will house some of the tall ships of Sail Boston 2000.

Kyle described the Chapter 91 and MHP review portion of the proposal. In terms of setbacks, the proposal meets or exceeds the Municipal Harbor Plan (MHP) requirements along all areas of the cove. Facilities of public accommodation requirements are satisfied, as are the open space requirements, which are slightly over 50% and do not include the parcel of land they donated to the City. The proposed heights are also within the MHP requirements. Kyle then described the proposal's interpretation of the PRP and the MHP, as requested by Secretary Durand.

Kyle's presentation to the Committee also included a proposed build out of the Fan Pier parcel following the strict guidelines of Chapter 91 with no substitutions. Kyle indicated that approximately the 3.3 million square feet of development would be accommodated on the Fan Pier site under the strict Chapter 91 guidelines.

Lou Casagrande asked what the regular use would be of the streets along the water's edge when they are not closed off for pedestrian access/festivals. Kyle responded that they would be used for traffic circulation, public vehicles, and parking. Linda Haar commented that the public street functions to separate the open space from the other uses on the rest of the Fan Pier so that the open space does not feel like it belongs only to the residential component. Lou noted that the proposal makes a strong connection between open space at the Courthouse and the Fan Pier.

Kyle noted that the proposal incorporates Harbor Hall as part of the gateway to the Harbor Islands, which will provide landside support, space for Boston Harbor cruises, and access points to main transportation centers. Steve Spinetto commented that most of the ferries are catamarans that front-load and asked how the cove will accommodate them. Kyle responded that there is a front-loading dock in the cove. Bruce Berman cautioned that the interior public space not end up like the great hall in the Marriott. Kyle responded that the Marriott area offers no landside refuge or ticket area, whereas the space they are proposing would be a 35 feet tall space with ticketing, rest areas, close proximity to the dock, and an ability to see boats as they arrive. Bruce asked about the time parameters on the interior public spaces. Kyle stated that the office buildings and hotel lobbies would be open 24 hours a day and Harbor Hall would be open from 6 a.m. until 10 p.m. or 12 a.m.

Rod noted that the proposal contained terrific improvements and asked whether the proposed piers are floating piers that could accommodate large vessels even in storms. Kyle responded that they are floating piers that would be able to accommodate large vessels in storms. He added that they hoped the cove would become a gateway for water transportation in the future.

Rod asked for clarification on the cantilevered portion of the pier. Kyle stated that the pier has to be cantilevered due to the fact that boat access has to be 20 feet out and there is not enough draw without the cantilevering. Lou noted that the proposal, in its description of the Fan Pier cove, does not include the other side of the cove (i.e. Pier 4). Kyle responded that the proposal attempts to leave options open since the developer of that site is not as far along in the development process. Lou also suggested that the ICA might want to take their programming outside. Kyle noted that they are encouraging art on the cove and hope to coordinate efforts with the adjacent property owners.

Bennet Heart noted that the proposal represented a fairly small change in the total program size and asked why the square footage allotted for parking garage had increased since the total office square footage had decreased. Kyle explained that this was due to the fact that residential use had increased and they allot 1.5 spaces per residential unit. Bennet asked whether Kyle felt that the alternative build out presentation which was shown by the proponents as strictly complying with Chapter 91 (with no substitutions) this development would be commercially viable to build and lease out. Kyle stated that the build-out is viable, and cited the example of the Esplanade in Cambridge.

Valerie asked whether the proposal included programming for the park and whether the park should be located in between the residential components in order to give the 24-hour public activity to those who live there. Kyle noted that some people would consider that a privatization of the park space. He added that the park is composed of an un-programmed green lawn and a programmed raised element with tables and seating with views of the waterfront. Steve noted that the Harbor Hall provides better access to the MBTA station.

Jim Doolin asked about water taxis and whether there had been any conversations with the MBTA or other providers. Kyle responded that they had a working session with the captains of the vessels who support the proposed configuration of the pier.

Vivien asked if they were proposing to subsidize water transportation. Kyle noted that at the start they will subsidize Hyatt to Hyatt water shuttle to the airport and later would like to incorporate feeders to Long Wharf, Rowes Wharf, and the World Trade Center.

Lou commented that the Children's Museum and other area attractions are trying to bring larger groups down to the waterfront. He noted that larger groups require buses which present a collective problem to property owners in the area. Kyle responded that the proposal establishes below grade parking (1.2 million square feet) that can accommodate large buses and keep them out of public view.

Shirley Kressel asked for a description of the residential component with respect to size and price. Kyle responded that there would be 300 multi-family rental units of mixed prices ranging from \$200-\$325/square foot. The 167 luxury condominiums (1,500 square feet each) will be located along the edge of the development. There will also be affordable units on site for artists, which will cost approximately \$250/square foot. These units will be 19 feet high from floor-to-floor and will offer flexibility to the seller by allowing them to chose their own design as a way to cut costs. In addition, they are working with affordable housing developers to produce some market and affordable units.

Toni asked if the development would incorporate the rail/maritime history of the site. Kyle responded that they were incorporating both rail and maritime history into the site.

Jamy Buchanan noted that at a recent community water transit meeting there was discussion about holding professional development programs on Thompson Island. She asked whether the marina would have the capacity for daily drop-off for these types of programs to and

from the Harbor Islands. Kyle responded that they had added a "touch and go" component to accommodate such uses.

Bruce commented that Save the Harbor/Save the Bay had requested visual aids to help communicate the scale and dimension of projects and that this presentation greatly aided in visualizing and understanding the proposal. He asked whether Spaulding and Slye could display it on their web site to illustrate the available tools to future developers. Kyle stated that they would and noted that they have also established a Fan Pier web site. Bennet asked whether the development proposal would be carried out in phases. Kyle responded that Phase 1 would include the first six blocks on the eastern side of the cove, the park system, the wave attenuator, and preparation of the seawall.

Shirley asked about the cost of each parking space. Kyle responded that each space costs approximately \$45,000 to construct. He added that this cost is not included in the sale price of the condominiums. Lou asked how many spaces would be included in Phase 1. Kyle responded that Phase 1 would create 1,600 spaces.

Diam O'Connell commented that, according to the South Boston Transportation Study, the entire area could accommodate 17 million square feet of development after which problems would arise. He added that it should be up to the community to decide where the development should go and that this plan places the development against the waterfront. Kyle noted that his statement was based on assumptions that might not be approvable.

A member of the audience asked how deep the green space at the top of the cove is and Kyle responded that it is 110 feet, 141 feet including the road. Shirley asked whether compliance with Chapter 91 was the final approval or whether projects would still have to go through BRA urban design review. Ann responded that projects still have to go through Article 80, MEPA, and urban design review.

Rod announced that the next meeting would include the City's Chapter 91 build-out analysis. Rod emphasized the importance of submitting the final draft to the state by the end of May so that the public process does not stretch into the summer months, typically a period of low participation. Vivien asked whether approval of the Fan Pier DEIR would occur before or after the approval of the MHP. Elizabeth Grob responded that the state envisions MHP approval before approval of the FEIR.

Rod noted that the third public meeting in the South Boston community has been scheduled for Wednesday May 17, 2000 at 7:00 p.m. at the Tynan School (650 East Fourth Street, South Boston).

The meeting was adjourned at 5:00 p.m. The next meeting is Wednesday, May 10, 2000 at 3:00 p.m. in the Piemonte Room (5th Floor City Hall).

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

April 19, 2000

Summary of Municipal Harbor Plan

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:20 in the BRA Board Room by Rod Macdonald.

Rod announced that comments on the draft Municipal Harbor Plan (MHP) that have been submitted to date were available for distribution. He added that at the last meeting the City was asked to summarize the MHP and reflect on the redrafting to date. Rod announced that Kyle Warwick would spend approximately 20 minutes at the next MHPAC meeting to explain the modifications to the Fan Pier project that were referenced in The Globe.

Summary of the Municipal Harbor Plan: Linda began by explaining that the summary would include a review of the shadow analysis and general content of the MHP. She stated that the City would still like to submit to the state in May and that the City has been meeting with the state to figure out what information should be incorporated into the final draft. Although the wind and shadow analysis were not in the preliminary draft, the City would include them in the final draft as originally intended. Linda noted that the state has requested a qualitative wind analysis and the City recently commissioned Frank Durgin to undertake this task. The shadow analysis will be completed by BRA staff.

Linda noted that she hoped to get comments as soon as possible. She commented that there have now been two public meetings in the South Boston community. The second meeting was held on Tuesday April 18, 2000 with approximately 30 people in attendance. At this meeting, there were many questions regarding future development rather than the municipal harbor planning process itself. She noted that the issues that were unrelated to the MHP would be addressed with other city agencies. The issues related to the MHP ranged from ideas (e.g. safe harbors) to the question of why the City is doing a MHP and included quite a few good ideas. Due to logistical considerations, a date has not yet been set for the third community meeting.

Linda stated that under the MHP, the South Boston waterfront area would have an average FAR (Floor Area Ratio) of 4 to 5, with the higher density (5) closer to the waterfront in order to ensure enough mixed-use development to attract people to the waterfront. The City does not support the FAR of the financial district and downtown (approximately 10) for the South Boston waterfront. In order to provide context, Linda noted that Back Bay has a FAR of 3.2. These numbers were established from a broad philosophical approach to getting people to the waterfront by focusing on the water, watersheet, and ground floor uses that spill out into public spaces. She added that there has been an unflattering comparison of proposed development on the waterfront with Kendall Square and reassured the committee that the waterfront will be the antithesis of Kendall Square which houses squat office buildings and no residential uses. The MHP proposes a mix of uses on the South Boston waterfront by requiring that at least one-third of development be residential,

rather than the 25% proposed in the PRP. In addition, the MHP limits office development to no more than one-third of total development.

The City's policy is to emphasize public uses, ways to get to the waterfront and the creation of an urban fabric similar to that of other Boston neighborhoods (rather than a "superblock"). Linda noted that since the Fort Point Channel has a different built environment, the City would like to see new buildings that reflect the historical character of the area. The FPC working group is attempting to define what should happen at the Channel's edge, but they will not be finished before the submission of the MHP. The City plans to amend the MHP once this is complete rather than submitting an incomplete and partial plan. Elizabeth Grob from CZM stated that this approach is acceptable provided that it is not tied to an offset. She suggested that the City submit this plan with the plan for the other side of the channel.

Linda commented that the City is still trying to identify substitutions for some of the smaller sites along the channel, such as the Children's Museum, the Barking Crab, and a portion of the McCourt property.

Linda described the baseline requirements of the MHP. All projects (small and large) within the MHP area will be required to have an Open Space and Public Access plan. The water dependent use zone in the MHP goes beyond Chapter 91 in the following ways: water transit requirements and enhancements are more specific, structures providing access to the waterfront are promoted, and the state's requirements for the Harborwalk are enhanced. Linda noted that safety, recreation, and accessibility enhancements have been added. In addition, the City is exploring the concept of floating barges to house beaches, playgrounds and entertainment uses.

With respect to the watershed, the current licensing process involves a one-year permit from the Harbormaster. The MHP proposes a structure for licensing that requires applicants to get approval from the city and the state even for one-year permits. The MHP enhances the state's open space requirement of 50%, by restricting some of the uses that the state allows. With regards to Facilities of Public Accommodation, the MHP enhances state requirements by requiring four-season rooms. The final MHP will provide a comparison between state requirements and the MHP. Through the MHP (policy) and licensing (implementation) processes, the City is attempting to achieve 24-hour public access on private land. The MHP also provides justification for the PRP policies that establish densities and heights. Overall, the MHP's requirements go beyond those of the state. Linda noted that in addition to the BRA shadow analysis each developer is required to conduct a wind and shadow analysis at the project review stage.

Linda explained that comparing Chapter 91 build-out and a build-out based on the proposed substitutions illustrates what must be offset. To date the City has not determined how to put a numerical value on this impact. Valerie Burns asked for clarification of what the offsets are. Linda responded that for height substitutions in the FPC, the MHP requires cultural/civic uses and interior facilities beyond the basic Chapter 91 requirements. In the Fan Pier and Pier 4 area, proposed offsets for height substitutions attempt to ensure active

public spaces at the waterfront. Shirley Kressel asked why the City is asking for height substitutions at all. Linda responded that the MHP proposes a better urban design plan than under a Chapter 91 scenario. The City is trying to create smaller blocks with a lower street wall and buildings with slender tower components in order to achieve a greater public space. She added that the Chapter 91 build-out and the MHP have approximately the same square footage – under both the Chapter 91 heights and setbacks and the MHP with substitutions, there is approximately 3 million square feet of development. Valerie asked if the 3 million square feet referred to both Fan Pier and Pier 4 and whether the plan specified a FAR of 5. Linda responded that it was for the Fan Pier and that FARs are not included in the MHP. She commented that the only negative impact of height is shadows and the MHP offsets shadows rather than height because height per se is not a negative impact.

A member of the audience, Ken Fields, asked for clarification whether exchanging shorter squat buildings for slender tall necessarily increases open space as an offset. Linda responded that the offset the MHP is trying to achieve is free public access to make the waterfront both useable and friendly. She added that the MHP goes beyond the Chapter 91 open space requirements and facilities of accommodation requirements. Bruce commented that the MHP has more restrictive requirements, noting the 50% open space requirement and that the offsets are for the creation of shadow rather than the loss of open space.

Valerie noted that the Institute of Contemporary Art (ICA) is a fee-based, private institution and voiced her concern of the economics of some of the proposed special destinations/cultural uses. She added that the ICA and the public's rights to the waterfront is an equity issue; she asked which special destinations are open to everyone free of charge. Linda responded that the four-season rooms are special destinations that do not require a fee or purchase. She added that there is also an offset that requires special events on the waterfront throughout the year. A member of the audience asked how the offsets become permanent, which is particularly important since they are offsetting permanent impacts. Linda noted that this would be determined and incorporated at the licensing phase. Bruce noted that although he has a great appreciation for the ICA, it only provides a public benefit to those who afford the fee. He cited the example of the Children's Museum, which has a voluntary contribution schedule in order to promote public access, and stressed that benefits should be enhanced to include free cultural/civic uses for the entire public, all of whom have invested in the cleanup of the harbor. Linda suggested that the museum could open the ground floor to the public or incorporate an open public exhibit space in the main cultural area free of charge.

Toni Pollack suggested a public display or public art interpretation as an offset. Linda noted that the City has been working with the state to establish a Historic Piers Network Plan harbor-wide. This effort started out as an offset for Battery Wharf, but may be extended all along the Harborwalk to the South Boston waterfront. She added that each wharf has a rich history and the required offset needs to be appropriate to the location.

Bennet Heart asked for a clarification on the source of the calculations for the Chapter 91 massing analysis. Linda responded that the BRA is doing its own analysis which would be included in the final draft.

Astrid commented that height, lot coverage, and density all affect the general demand on water-related public infrastructure (e.g. pipes, roads, etc.) and noted that these factors become relevant on a system-wide basis. Linda responded that this was a technical issue that would be addressed at the time of licensing and permitting for a particular project as part of the MEPA process rather than the MHP process. Jim Doolin noted that the impacts depend on build-out, not height. Astrid suggested that the MHP should flag developers to issues that may affect development approval in the licensing process. Linda responded that these issues are part of the normal MEPA and Article 80 process that get reviewed as part of the permitting process, even outside of the Chapter 91 jurisdiction.

Steve Cecil commented that the main issue now is how to balance the offsets and substitutions. He added that Chapter 91 is a starting point, but there is no presumption that Chapter 91 provides the best protection of the public interest. He concluded that the difficulty lies in trying to balance substitutions/offsets in advance as it is not possible to know the exact impact until projects come forward. Shirley Kressel asked if the final draft would include modeling of Chapter 91 massing compliance; Linda answered in the affirmative. Shirley commented that she would like to see proof that proposed substitutions result in better urban design, because she suspects that they will simply result more money for developers. Rod noted that these analyses of the Chapter 91 and MHP build-out would be forth coming.

Inner Harbor Shadow Study Revisited: BRA staff revisited the shadow studies modeling various times throughout the day on March 21, June 21, September 21, October 23 and December 21. The models are based on Chapter 91 build-out heights and setback. Ann noted that Chapter 91 heights were superimposed on the street and block plans to compare the shadows on Fan Pier and Pier 4 to the project proposals and analyze net new shadow in the Shadow Protection Zone.

The meeting was adjourned at 5:00 p.m. The next meeting is Wednesday, April 26, 2000 at 3:00 p.m. in the BRA Board Room (City Hall Room 900).

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

April 12, 2000

Discussion on Substitutions and Offsets

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:20 in the BRA Board Room by Linda Haar.

Linda began the meeting by announcing that today's meeting would focus on substitutions and offsets. There had been some questions and concerns on the substitutions and offsets contained in the draft Municipal Harbor Plan (MHP). As a result, the committee would focus on offsets and try to craft the language for the MHP. Valerie Burns suggested that several people work together after the meeting to draft the specific language and present it to the committee next week. The committee agreed that there would be a MHPAC meeting next week (Wednesday, April 19, 2000).

Discussion on Substitutions and Offsets: Linda framed the discussion by explaining the constructs of the preliminary draft. She stated that until each development proposal is under specific project level review, it is extremely difficult to define its exact impact. As a result, the draft MHP defined a menu of offsets to choose from at the project review level. It also describes specific offsets for specific substitutions in particular geographic area (Section 10). The state has commented that the substitutions/offsets were not specific enough and there has been some question whether offsets were a condition of proof of impact or generally required.

The City is now taking the approach where if it is clear that an impact (e.g. shadow) is created by a substitution (e.g. height), then an offset is required. While it may be possible to determine that there is an impact (such as a shadow which is measurable in terms of square feet, duration and time of day), the difficulty lies in trying to quantify the impact in terms of its effect on usage of the waterfront. The City is attempting to draft language that incorporates an offset for a substitution that is not based on quantifying the impact, but on the fact that there is an impact at all.

Valerie commented that she reread the shadow/wind studies and was wondering whether project proponents must compare proposals with Chapter 91 build-out conditions. She asked whether Chapter 91 build-out conditions should be part of the MHP rather than leaving developers to gather the information on their own. Linda responded that the City is in the process of incorporating Chapter 91 build-out into the MHP.

Seth Kaplan asked if the BRA has considered imposing a street grid onto the plan, particularly for the Fan Pier area. Linda responded that Kairos Shen was working on this. Seth requested clarification whether the street grid in the MHP would be from the Public Realm Plan (PRP) or from developer's proposals. Linda answered that it would be primarily from the PRP.

Valerie expressed her concern about the effect of shadow in the Fort Point Channel and stated that she would like to see the channel's watershed as a shadow protection area. Linda noted that the shadow protection zone is being extended along the channel.

Linda turned the discussion to the issue of which menu of substitutions is appropriate to specific geographical sites. She began the discussion with the Barking Crab site, which she described as a small site with little room for on-site offsets. The draft MHP did not include a menu of offsets for this site, but the state is requiring that offsets be identified for the Barking Crab and the other smaller sites. Vivien Li suggested the possibility of contribution to water transportation or the cultural loop as possible offsets. Bruce Berman noted that there is already the Waterfront Access Improvement Fund, which could be used to focus on how to make on-site offsets in the district work better, promote access to the waterfront, and direct resources where on-site offsets are not possible.

Linda asked Elizabeth Grob from CZM for clarification on how specific the fund needs to be. Elizabeth responded that the scope outlines the necessary elements, which include management, how projects are selected, time line for public benefit, and framework. Linda commented that it could take up to a year to define the fund in a comprehensive way and stated that the committee would like to have the option of the fund as an offset sooner. She asked Elizabeth whether the City could submit the MHP and the scope of the fund separately. Elizabeth responded that the state expects them to be submitted together. Bruce suggested incorporating language that tightens the connection between the two in anticipation that at a subsequent time the Fort Point Channel Working Group would provide greater specificity. Valerie suggested that the committee set priorities and parameters for the use of the Waterfront Access Improvement Fund.

Jamy Buchanan noted that she represents the businesses at the Barking Crab site and asked that the committee not use the Barking Crab site as the basis for this discussion since it has physical constraints that are unique. She added that the owners are interested in establishing on-site water transportation facilities as an offset and would like to have all the offsets that are available at other sites made available to them.

Greg Carrafiello commented that although sites are encouraged to incorporate water-based public facilities, they are not required to construct water transportation facilities. As a result, the state would have to determine if a proposal went above and beyond this requirement and whether it could qualify as an offset. Linda noted that this raised the question of what is the base requirement under Chapter 91 and what offsets (in this case water transportation component) are required by a specific substitution. Jamy reiterated that the Barking Crab site owners would like to utilize the same offsets available to other sites rather than paying for offsets elsewhere. Linda commented that the City needs an understanding of base requirements versus offsets as it relates to water transportation. Elizabeth stated that an analysis of the impact needs to be completed prior to selecting an offset.

Linda asked the group whether the Waterfront Access Improvement Fund should be limited geographically to areas that contribute to and use the fund and what those areas

should be. Astrid Glynn responded that the area should be as expansive as possible in order to ensure that the fund is as broad as possible. Vivien commented that in the subcommittee there has been some discussion about the use of the fund for capital improvements on various islands and asked whether these types of activities should be included as well. Astrid noted that she did not want to limit or restrict the fund. Bruce commented that the fund should be applied to the jurisdiction of the MHP and directed toward the specific list of offsets. Lou Casagrande suggested a higher level of coordination since certain improvements may require contributions from several landowners due to high costs. Astrid suggested that the BRA work towards identifying and implementing a strategy to define the policies, means and goals of the fund.

Valerie suggested that the fund could be defined with a list of activities and principles derived from the work of the Civic Events Working Group on programming and activating of the waterfront. Another committee member suggested that the working group continue to identify accountability and specificity mechanisms necessary for the plan. Bruce added that the fund does not refer to only one-time payments and asked for clarification on the mechanisms to determine values. He also noted the practical difficulty in determining both the value of substitutions and offsets and whether the two are equal. Elizabeth commented that there should be a formula to obtain estimates of future use and impact. Linda responded that the City has been struggling to come up with such a formula, but has had difficulty in concretely putting a value or number to these impacts.

Dan Lynch asked if the fund have to go through the same process as the MHP. Linda responded that the fund would have to be approved by the state. A member of the audience, Michael Bare, asked if the fund was over and above the linkage fund. Linda clarified that the fund as an offset option is totally separate from a linkage fund. Linda added that it would apply mostly to smaller and infill sites and would work best on the FPC. She also stressed that paying into the fund was not a way to get out of baseline requirements or other offsets.

Valerie commented that the committee should not allow the development of a two-tier system of where things do and do not happen on the waterfront. She suggested that the fund be a democratized fund for the water's edge where benefits are shared equally and no areas are precluded from funding. Linda noted that requiring citywide events is an offset option on the larger sites. Valerie asked how to ensure that events/programming occur into the future and noted her concern about private developers providing public entertainment. She suggested that a fund would be concrete and endure provided that it is set up correctly.

Bennet Heart suggested matching impacts with offsets, using the example that if a developer wants a substitution for a 50% open space requirement, the offset should be to provide (or provide money for) open space elsewhere. Vivien noted that benefits should be for the South Boston waterfront where the impact is. Valerie suggested that the committee hear from the real estate community on technical mechanisms and square foot valuation. Elizabeth commented that money from the fund could be spent outside of the district as long as it is proved that there is a relationship.

Linda described the Chapter 91 policy of activating the waterfront and asked the committee for opinions on special destinations. A member of the audience suggested the provision of roof decks and/or upper floors that are available to the public at all times as a possible offset for height substitutions.

Shirley Kressel commented that there might be irrevocable damage to the public realm and suggested that the conversation should begin with the explanation and justification of each substitution. She suggested that when development has unintended negative side effects, the offset should compensate that particular impact. She added that the city should conduct a property tax revenue analysis to determine how many new public dollars would result from the proposed development. Linda responded that there have been many discussions on substitutions during the course of the MHPAC meetings. She noted that the PRP only referred to a minimum percentage of residential, whereas the draft MHP specified minimum residential and maximum office percentages.

Jim Doolin noted that despite the fact that there are differing opinions, a great deal of time has been spent on the Chapter 91 rationale for the heights proposed in the MHP. He added that it is unrealistic to think that the committee would reach complete agreement, instead the group should work on as much as it can over the next four weeks. Linda reiterated that the state will hold a public hearing and the city will have two more public meetings in the South Boston community. A member of the audience asked whether a meeting would be held in the Fort Point Channel neighborhood. Linda responded that throughout the PRP and MHP process to date, people from the South Boston and Fort Point Channel neighborhoods have been attending the same meetings.

In response to another question about additional tax revenue from development, Linda responded that the MHP is not about city revenue. Additional tax revenue goes into the City's general fund and this policy would not change because it is dealing with development on the waterfront. Alice Boelter asked about the specifics of sidewalks. Linda responded that many of the earlier meetings focused specifically on streets and sidewalks, lights, continuity lines and responsibility for them. She noted that private property owners are required to build/maintain accessible public streets and that these issues were resolved a long time ago.

Valerie noted that she has not seen anything in the offsets that justify substitution of the heights as described in the MHP. Linda responded that people keep focusing on height and height substitutions rather than looking at building massing. The building massing in the MHP is about the same as under Chapter 91, but it produces a better urban design by incorporating higher heights and less width. Valerie noted that the baseline has not been fully analyzed and requested an analysis of the massing. Linda stated that Chapter 91 comparisons would be included in the final draft and noted that the draft MHP was only a preliminary publication. She reminded the committee that many of these pieces, such as shadow and massing, already had been presented.

Vivien expressed her confusion about the aggregation of open space and called for further discussion on this issue. Bennet commented that if the committee does not understand the

rationale behind the MHP, it could forecast trouble at the state level. He recommended that the committee continue to work on these issues until they are resolved. Linda responded that although there is disagreement on some issues, the level of confusion has been greatly overstated. Joy Conway suggested that perhaps the Chapter 91 plan should be presented again to remind everyone that no one liked that plan and it is the reason why the committee was formed in the first place. Bruce noted that there is disagreement on assumptions, analysis, and conclusions and asked the City to "show its work". He added that it is not all about building heights, noting that heights that meet Chapter 91 regulations do not ensure that a place is a utilized, public destination. He noted that the committee's goal is to improve and activate the harbor that the public just spent four billion dollars cleaning up. Linda stated that the City has been showing their work through various presentations and Chapter 91 comparisons. Bennet suggested that the City provide a summary of the process that identifies substitutions, rationale, and offsets. Linda agreed to summarize the MHP at the next meeting.

Several questions were raised with regard to specific project proposals. Linda responded that those concerns should be addressed in the project review process, not the municipal harbor planning process. She stressed the fact that each property owner had a chance to present their development plans and the committee would not hear presentations on what property owners had proposed on other owners' land since this is not what the process is about. Toni Pollak noted that the committee is not going to be in total agreement and needs to focus on Chapter 91. She added that focusing on current project-specific proposals strays from the purpose of the committee.

The meeting was adjourned at 5:20 p.m. The next meeting is Wednesday, April 19, 2000 at 3:00 p.m. in the BRA Board Room (City Hall Room 900).

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

April 5, 2000

Presentation of the Louis Berger Study – Kairos Shen, BRA and Ned Codd, BTB

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in the BRA Board Room by Committee Chair, Rod Macdonald.

Rod opened the meeting with the announcement that the City's new target submission date would be early May. Rod announced that following the presentation of the Louis Berger Study, Linda Haar would review the public process timeline for the Municipal Harbor Plan.

Rod suggested that the committee revisit the process of going around the table to talk about two or three issues/ideas that should remain in the plan or that should be improved upon. He noted that although the committee members represent many different constituency groups that may comment on the plan, he hoped that the members would comment individually while the plan is still in the drafting stage. Valerie Burns stated that she had hoped that the committee's next step would be to put something in writing since they had already shared their thoughts. Rod cautioned that since it is such a large and broad committee, it would be difficult to achieve consensus. He advocated that people speak independently about the MHP rather than watering down opinions through the committee process. Bruce Berman suggested that comments in response to the draft MHP should be distributed.

Timeline: Linda announced that the City is planning to submit the MHP to the state in the beginning of May. She noted that although the schedule has changed, it has only been extended because the City added more time as requested. Redrafting of the plan has already begun based upon the comments so far. She added that written comments would be extremely helpful at this stage and that the sooner they are turned in, the more they would be reflected in the final document. Linda requested that written comments be submitted by April 12, so they can be distributed at the following MHPAC meeting.

The official review period will begin once the plan is submitted to the state. Linda reminded the group that the City added this preliminary stage in order to get additional input. EOE and CZM would hold a public hearing shortly after the City's submission. The City has committed to having three community meetings, one of which has already taken place. The second meeting is scheduled for April 18th at 6:30 p.m. at the Condon Community Center and the third public meeting has not yet been scheduled.

One of the City's goals is to have a document that is easy to understand. Linda commented on the complicated nature of the City's first harbor plan, which concluded with a 20-page approval letter. For this submission, the City would like to get feedback from the state, incorporate the necessary changes, and then produce a final public document. This would eliminate the need to cross-reference between the MHP and an approval letter.

Steve Cecil commented that during the drafting of other municipal harbor plans, the city and

the state generally work closely in order to ensure that the submission is approved and the public review period is often just a forum to address any remaining issues with few changes made after submission. He asked whether this would be the case with the South Boston MHP. Linda responded that the City is currently working with the state (CZM and DEP), but she could not prejudge the document's approvability. She added that the state has requested further clarification on the following issues:

- additional comparisons between the PRP and the MHP with regards to open space, pedestrian access, building heights, etc.;
- inclusion of discussion of shadow study and wind analysis, as well as how standards were developed;
- substitution and impact analysis;
- specific substitutions tied to specific offsets.

Linda added that the committee has discussed many of these issues, most of which were to be included in the draft MHP but were not fully developed at the time of publication. Steve noted his concern that additional thinking would go into the document that the public would not see until after it is submitted. He asked whether the CZM/DEP staff anticipated that the Secretary would sign off on the MHP and whether the MHPAC would see the revised draft prior to submission to the state. Linda responded that the state did not request the preparation of a preliminary draft, rather it was issued by the city in order to get feedback. Elizabeth Grob from CZM added that it is not possible to predetermine whether the state would approve the submitted plan or require additional changes. Linda stated that she wanted to clarify the misconception that once the plan is given to the state the public review period is over, when this is actually the beginning of the public review period. Elizabeth added that although it would be ideal to require no changes and streamline the process, the level of public comment is also a factor.

Vivien Li noted that many people have invested a great time of time and are hoping things will move quickly so that development can occur. Since development cannot go through final environmental review until the MHP is approved, she asked whether the committee could do anything collectively to minimize the number of changes required after the document is submitted. She added that she would like a discussion on specific offsets and substitutions. Rod commented that there are some sections, including the offset/substitution section, that are being reworked and that everyone would have a chance to comment on the plan at both the city and state level.

Presentation of the Louis Berger Study: The South Boston (Louis Berger) Transportation Study will be available next week. Copies will be mailed out and available for pick up in City Hall Room 721. The study was a year-long joint effort by the Boston Transportation Department in association with the Boston Redevelopment Authority and Massport (Massachusetts Port Authority) that focuses on the changes in South Boston land uses and transportation systems. The CA/T extension of Interstate 90 (I-90) through the South Boston waterfront to connect with the Ted Williams tunnel, transit improvements, and a new surface street system will transform South Boston and increase capacity and accessibility to the waterfront. Neighbors and truckers had concerns about increased traffic even with the improved access and transit system. As a result the transportation study focused on capacity

of the transportation system with three goals in mind: protecting the residential neighborhood, preserving the working port and industrial economy, and enabling development.

The community was involved in the study and worked on issues of short-term traffic management control and the transportation infrastructure that will be in place once the Transitway is completed. The study focused on how to improve truck access without using neighborhood streets and how to access the South Boston waterfront without negatively impacting the neighborhood. According to the study, the completion of the CA/T project will result in improved access to the waterfront and improved route connections for trucks and industrial businesses. The proposed surface street improvements are primarily minor links that improve the street network, allowing travel into the industrial area and past the convention center and related construction. The study recommends that the East side connector road be preserved as a secondary access for trucks to access the convention center and West First Street, and to increase neighborhood connections to the waterfront.

Ned noted that the study discusses existing and future infrastructure and development needs. South Boston currently consists of approximately 14 million square feet. Based on the CA/T project (Green Book), the projected land use is a total of 27 million square feet in 2010 and 31 million square feet in 2025. The BRA's Public Realm Plan estimated full build-out at 38 million square feet in 2040. Two full build-out conditions were studied: high residential and high office land use. The high office projection requires a higher level of additional transportation capacity than the high residential scenario.

The proposed transit system has the capacity to support a level of 31 million square feet of development which will not be met until 2025 according to the Green Book. This system would accommodate a significant amount of development on the South Boston waterfront. However, in order to increase capacity and service delivery in the future the city could consider the following options:

- light rail versus heavy rail
- changing the Silver Line to light rail
- diverting the Green line out to the South Boston waterfront
- connections to the Riverside line, such as a new tunnel through Back Bay
- connecting the Silver Line to the Urban Ring transit line

Ned stressed the fact that these are extremely conceptual ideas to bring transit to the South Boston waterfront as envisioned and required by full build-out.

Discussion: Vivien asked if funding had been identified for the truck improvements and mass transit improvements. Ned responded that the transportation study is based upon concepts and it is not the study's intention to identify funding for mass transit and truck improvements. He added that funding has not yet been identified to connect the Transitway from South Station to the Washington Street corridor. Astrid Glynn requested that Ned elaborate on the operating side of water transportation and whether the report discusses the amount of shortfall. Ned responded that the study does not identify operating subsidies and stressed that these issues are not within the scope of the study, which focuses on capacity and demand.

Joy asked for additional detail about the study's proposed 43 vehicles per hour. Ned stated this number was in the MBTA's initial plan for Transitway service. Howard Hayward noted that this was the figure presented by Mike Mulhern to the MHPAC at the meeting last week. Based upon the MBTA's plan, there is approximately a 1½ minute headway in the tunnel and each station can accommodate three vehicles at a time.

Steve Spinetto asked if the Silver Line was connected to the airport. Ned responded that the Airport Intermodal Transit Connector (AITC) would make connections between South Station and the airport using the Silver Line tunnel. Erin Gordon asked about the timing of the AITC. Jim Doolin from Massport responded that AITC service should start around the same time as the Transitway.

Stephanie Pollack asked whether it would be necessary to change or add more Silver Line vehicles in order to accommodate an additional 4 million square feet by 2025 (31 million square feet total). She also asked what would happen if there was no money to do so. Ned responded that enhancing or increasing the capacity of the Silver Line is part of the plan, but that the funding specifics fall outside the scope of the Berger Study. Stephanie noted that if this problem is not resolved, the last 7 million square feet might not get built due to the high-priced enhancements required beyond the first new 17 million square feet (31 million square feet total). Jim clarified that the transit improvements are not directed solely at 7 million square feet of development, rather they are system-wide transportation enhancements that include downtown Boston and both sides of the Fort Point Channel.

Valerie asked whether convention center development was included in the calculations and Ned responded in the affirmative. Rod asked if the East Side Connector Road would require additional public funding. Ned responded that it was his understanding that these costs would fall under convention center funding and require no additional public funding. Stephanie noted that the Convention Center Draft Section 61 findings detailing funding commitments are available to the public and do not include the Connector Road. A convention center representative responded that this issue is still under evaluation by the community, constituent groups, and the convention center staff.

Astrid asked whether the Berger study describes the timing of additional improvements. Ned stated that it recommends truck improvements as soon as possible, but does not go into detail about specific timing of other improvements since it is not a micro study. Astrid asked if the study should be on a micro level for the MHP. Kairos responded that the transportation component is part of the MHP context and that the analysis depends on actual overall build-out. To provide context, he used the example of downtown Boston which has absorbed 20 million square feet in 20 years.

Ned noted that the report emphasizes an early increase in transit ridership and maximization of the Transitway in order to achieve build-out. He added that the Berger Study is a district-wide study of a district that is not built at this time and it is not perfectly predictive of what will be built. It should be used as a tool to follow development progress and identify future needs. Vivien noted she would like the committee to discuss the possibility of having developers subsidize transportation as a possible offset. Jamy Buchanan noted that water

transportation appears to need more public subsidy (than other forms of transportation) simply because car travel is subsidized through highway construction. Ned announced that the study would be ready for release early next week with an open comment period of two weeks.

Linda asked Bruce Berman to summarize the recent watersheet standards meeting between representatives of the marina and boat operations. They group concluded that:

- innovative approaches should be utilized in order to get people to the waterfront, particularly in the Fort Point Channel;
- slips should not be viewed as Harborwalk due to safety concerns;
- bulkhead access should be considered instead for the Harborwalk;
- marinas should be encouraged to make docks as useful as possible;
- houseboats scattered randomly throughout the waterfront are inappropriate and should be in designated marina areas;
- clarification is needed on designation of transient use (short-term parking vs. luxury yachts, etc.);
- city should establish signage and short-term parking that is not located in the marina.

Steve Spinetto recommended increasing residency preference of boat slips. Bruce noted that creating more marinas would help keep rates down.

Rod announced that if committee and/or audience members have draft comment letters, they should get them as soon as possible. He also reminded everyone that there would be another opportunity to comment on the MHP after it goes to the state. Dan Lynch stated that the South Boston community would not accept scheduling the three required community meetings three days in a row. Linda assured him that although the third public has not yet been scheduled, it would be not fall directly after the second meeting.

The committee agreed to hold an additional MHPAC meeting next week in order to discuss specific aspects of the MHP with a focus on offsets and substitutions.

The meeting was adjourned at 5:00 p.m. The next meeting is Wednesday, April 12, 2000 at 3:00 p.m. in the Piemonte Room (5th Floor City Hall).

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

March 22, 2000

Presentation by the MBTA on the Transitway

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in the BRA Board Room by Committee Chair, Rod Macdonald.

Rod opened the meeting with the announcement that the comment period for the draft Municipal Harbor Plan has been extended until April 5, 2000. The City's new target submission date is mid-April. In addition, the next MHPAC meeting on April 5, 2000 will include an update on the Berger Study and a continuation of the draft MHP discussion.

Presentation by the MBTA on the Transitway: Howard Hayward, Chief of Design and Construction, began the presentation by announcing that the Transitway is scheduled to begin service in December 2003. Construction should be finished by mid-year 2003 in order to begin testing the system in July 2003. He noted that five of the seven Transitway (civil) contracts are under construction; the other two (electrical and finishes) have not yet been awarded. The MBTA submitted a \$600 million recovery and financial plan to the Federal Transit Authority (FTA) and have a \$413 million full-funding agreement with them. They are confident that they will be able to complete the program within the revised budget as approved under the current program.

Several complications have arisen over the life of the project. First, the MBTA was delayed in their attempt to build a tunnel under the Russia Wharf building, which has changed hands three times since the project's inception. However, the MBTA has now reached a final agreement with the current owner (Equity) to build a tunnel underneath the building using a method which allows for occupancy of the building during construction. Second, the MBTA is working within the same footprint as the Central Artery and the World Trade Center had concerns about concurrent excavation. The two entities decided to engage in joint contracting, which is now well underway and ahead of schedule. In addition, Howard noted that all tunnel work and the Courthouse Station are under construction. The MBTA is working with Massport to integrate airport service with the convention center to install two (bus) stations there, and with the South Boston community to ensure that community access to the new stations is provided.

Vivien Li asked for clarification regarding the representations that showed two different configurations of the Courthouse Station. She asked what is being built currently with the funding that has been awarded. Howard responded that Courthouse Station is now under construction using a design based upon an Omnibus Agreement between the MBTA, the City, the Central Artery and the McCourt Company (property owner of the site). This agreement dealt with land issues and determined the scope of work for the station. It incorporated a longer concourse in order to accommodate multiple headhouses. Although the station will house temporary headhouses at this time, they can then be replaced with permanent, monumental headhouses by private developers in future years. The station is

Howard commented that the MBTA had originally planned for small stations with small headhouses, but their partnership with the McCourt Company allowed them to increase capacity and decrease cost. He added that McCourt would develop the concourse and pay for future upkeep and maintenance. Diam O'Connell confirmed that the Omnibus Agreement includes McCourt's commitment to help build, design and maintain the station.

The conversation shifted to pedestrian access/egress. It was noted that egresses are located at Pittsburgh Street and the World Trade Center, but that there is no pedestrian access at West Service Road. Howard added that the MBTA's is committed to completing the design work for Northern Avenue, which the Highway Department will then construct.

Harold Sparrow asked how the MBTA arrived at the estimated number of riders during peak hours. Mike Mulhern responded that the MBTA estimates moving 3,400 passengers during a peak, one-hour period based on vehicle capacity. They are buying 24 vehicles for the Transitway route and 8 vehicles to service the airport. In comparison, the MBTA's most heavily trafficked bus route serves 16,000 passengers with 24 buses. The MBTA plans to handle 55% of commuter trips to the waterfront according to CTPS (Central Transportation Planning Staff) estimates. In addition, they anticipate that ridership will expand due to the growth and new development in the area. Erin asked what would happen to the local and express routes now in existence. Howard responded that the MBTA is working on a comprehensive plan that would take a blended approach to increase efficiency and best meet current and future needs.

A committee member asked the MBTA to provide additional information on the World Trade Center station. Howard stated that the MBTA would give people direct access from the World Trade Center; he also noted that they might do something additional above the station. They plan to have a one-seat ride carrying approximately 600 people to and from the airport; however, to date the MBTA has been unable to finalize their agreement with Massport. The MBTA is attempting to blend the service network in order to meet the overall needs of the community.

Dan Lynch asked whether the MBTA anticipated any problems on New Northern Avenue that might prohibit trucking. Howard responded that they do not. Bruce Berman asked whether it was time capabilities/restrictions or the capital cost of vehicles that limited the number of vehicles. Mike responded that how often each vehicle can be recycled is dependent upon how long the route is. He added that on each vehicle there are 54 seats and the rest of the passengers would stand. Mike indicated that the MBTA estimated both a low and high growth scenario and then purchased a number of vehicles based upon the high growth scenario. The MBTA is confident they will meet transportation demand since they have planned for the highest projection. Vivien voiced her concern that although the MBTA has planned for the immediate future, there may be problems ten years out. Mike reiterated that the MBTA has planned for the high growth scenario and that there is an option in the contract to purchase additional vehicles. Shirley Kressel then asked whether the MBTA would be able to provide service 25-years into the future. The MBTA responded that even if the projection continues to grow they could accommodate 60,000 passengers per day, which is more than the Blue Line today.

being built to accommodate future growth and expansion in order to meet the needs of the future, minimize public funds, and include the needs of the public.

An audience member asked for clarification regarding the types of ventilation system that would be used. Howard responded that there would be no vent shafts and that ventilation would occur at ground level.

Rod asked if the fact that the headhouses are not fully developed would affect the serviceability of the station. Howard confirmed that the stations would be serviceable without full development of the headhouses. He also elaborated on the placement of the headhouses, which were originally proposed at mid-block, but have since been moved to street corners as required by the Transportation Department. There will be a headhouse located on each side of the corner of Pittsburgh and New Northern Avenue on the McCourt property (does not involve the widening of the street) and a headhouse on West Service Road in the rotunda area.

Jamy Buchanan asked how long the temporary head houses would remain in place and when would they become permanent. Howard responded that if the MBTA was able to work out all the details with McCourt company, they could be built-out right away. At this point, Kyle Warwick asked whether the public has any say in the design of the headhouses. Howard answered in the affirmative.

Rod asked Howard to clarify what is currently under construction and what is planned for the future. Howard stated that all of the tunnel work is under construction. The tunnel extends down Atlantic Avenue, underneath the two Russia Wharf buildings at Congress Street, under the Fort Point Channel, Victoria Station and New Northern Avenue. The Transitway then portals/re-emerges above ground before D Street, crosses D Street and hooks up to the Connector Road that Massport is building. The Transitway will have routes that service the convention center and the community. The mechanical system for the tunnel (i.e. lighting, etc.) and finishes for the station are the only jobs that are not under contract yet.

Mike Mulhern, Chief Operating Officer at the MBTA, noted that the MBTA is finalizing their contract with a European company for low-floor, 60 feet, dual-mode, clean diesel engine, full performance vehicles that can accommodate up to 130 passengers. These vehicles function as trolleys inside the tunnel and become buses above ground, enabling the MBTA to get into the South Boston community. The MBTA estimates that their average peak load will be approximately 97 passengers.

Erin Gordon commented that D Street might become congested and problematic as the Transitway vehicles attempt to get across the street. She inquired why the MBTA did not continue the tunnel under D Street in order to keep the Transitway underground. Howard responded that although the MBTA would have liked to extend the tunnel under D Street, the \$20 million cost prevented them from doing so.

Steve Hollinger requested a comparison between the density levels in the MHP and the Green Book. Kairos Shen stated that the existing square footage in the South Boston waterfront area is approximately 13 million square feet, of which approximately 9 million square feet is industrial space. The green book build out in 2010 is 25 million square feet. The MHP projects that essential capacity will go to 30 million square feet before the Transitway reaches capacity. As noted in the Public Realm Plan, the City anticipates some upgrades of the Transitway in 2025.

Vivien asked Howard to describe the road configuration of Northern Avenue. Howard responded that the one unresolved issue is whether there will be a curve in the road or whether the intersection will be rectilinear. He noted that a change on the surface, such as road configuration, would not affect the building of the Transitway below the surface.

Michael Lewis, head of Design and Construction for the Central Artery/Tunnel Project, added that the Central Artery Project plan several years ago included the concept of a curved road aligned with the rotunda, which was the City's preference at that time and was included as part of the Omnibus Agreement. Howard added that a change in this plan would not delay Transitway construction.

Stephanie requested a timeframe for the design and construction of the road/street surface. Michael Lewis responded that the construction of the surface would begin immediately after the Transitway is completed underground. Howard stated that they are planning to start the surface restoration in early 2002, following an 18-month design period. Kairos added that currently the City is working with the MBTA for their proposed design of New Northern Avenue. In addition, the City is actively working to make sure that the MBTA's design of Northern Avenue can fulfill all of its traffic functions by the time it has to. He stated that the Omnibus Agreement does not include a final design and curve of the road. Kairos suggested that the City would probably initiate a public process to review a curve into Northern Avenue at the same time when it is proposed by the MBTA, MHD or appropriate state agency, but at this time is reviewing the MBTA's plans for a straight street. Diam commented that the intent of the bend in the street was to provide an easy route in relation to the cove and to ensure that truck traffic would not be precluded from passage. He added that, according to their own analyses, truck movement proceeds more efficiently with a bend in the street than with a four-way intersection. Dan Lynch expressed concern for the industrial and business communities. To allay his concerns, Diam stated that he had met with Neil Fitzpatrick who was comfortable with the configuration.

Vivien commented that she had concerns that the City, State, and developer were not on the "same page". Valerie voiced her concern about the MBTA's statement that they would service 55-65% of all commuters on the Transitway. Mike clarified this by noting that the referenced figure was for the entire transit network and included water shuttle and bus routes. Valerie then reframed her concern as a general issue of how to get people out of their cars and onto public transportation. Mike responded that these issues are part of the larger planning process. Rod added that this discussion should continue at the next meeting after the update on the Berger Study.

Bruce Berman commented that he had confidence in the plan presented and that his transportation anxiety had decreased due to the fact that all the planners appeared to share the same assumptions. He noted that there appeared to be a lack of communication with the greater public and that many concerns have been based on false assumptions. He also added that developers should take proactive steps to discourage car traffic. Howard indicated that the MBTA was trying to improve their efforts to promote the Transitway.

Stephanie commented that the regulations for approving the MHP require full consultation between the City and any other (state) agency in order to achieve compatibility. She also noted that the issue of whether the street has a curve or is rectilinear seems to be symptomatic of the fact that there is a disconnect/lack of consultation between the agencies involved. Linda responded that the information presented today should illustrate the extensive consultation between the entities. She added that the only outstanding design issue does not relate to transit capacity.

Mike reiterated that the MBTA is following their original plan to build service based on a high growth projection. He noted that the MBTA is constantly revising and adding to their service. He added that the MBTA is having an unprecedented period of growth – they have added more riders than any other transportation agency, and as a result, is well equipped to respond to changes in service. A member of the committee stated that it would be more prudent to resolve the issue of street configuration now.

Harold commended the MBTA on their presentation and noted his concern about the other 45% of commuters not taking public transportation, as well as the impact of cars and parking garages. Linda responded that the next meeting would focus on ground transportation and the Berger Study.

Steve Cecil expressed his growing concern about the advisory committee's agenda. He stressed the importance of creating the best Seaport possible, but noted that time is becoming more precious. He reminded the committee to focus on issues specific to the municipal harbor plan.

Valerie asked for elaboration on what is planned for the other end of the Silverline in order to connect the waterfront to the rest of the city. Howard responded that the MBTA is in the first phase of reconstructing Washington Street and preliminarily designing direct connections with Chinatown, Boylston, and the New England Medical Center. He added that this is one of the MBTA's main priorities.

Jamy asked whether old Northern Avenue would be reconstructed three times from the street-level perspective. Howard responded that they intend to build it only once, after coming to agreement on the design. Another member of the committee asked for additional information on the clean diesel buses. Mike responded that these are the latest EPA-certified buses, which operate as (environmentally) clean diesel vehicles off the wire. Kathleen Kenneally commented that there has to be a much better communication and coordination effort.

Harold suggested that there should be incentives in place for developers to work together in the MHP process. Vivien suggested that the tunneling of the Transitway along D Street and other transportation infrastructure improvements could be added to the list of offsets. Harold commented that offsets and enhancements should be tied to incentives that produce public benefits and could even include tax breaks. Linda cautioned against this approach, which would require developers to build at the same time and would require the City to identify things it is willing to give away. She added that the City is unwilling to give away height or density bonuses. She also commented that the uses of the Waterfront Public Improvement Access Fund, a concept already in place in the MHP, are not specified and could be designated for infrastructure improvements.

The meeting was adjourned at 5:00 p.m. The next meeting is Wednesday, April 5, 2000 at 3:00 p.m. in the BRA Board Room (City Hall Room 900).

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

March 15, 2000

Discussion of the Draft Municipal Harbor Plan Continued

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in the BRA Board Room by Committee Chair, Rod Macdonald.

Rod opened the meeting by distributing a working list of issues generated at the last meeting (March 8, 2000) for further discussion. Linda made an announcement that comments on the draft Municipal Harbor Plan should be submitted in verbal, written or email form and they should be received no later than 5:00 p.m. on Friday, March 24, 2000. She reminded the group that there would be another opportunity to comment on the final plan, which the City plans to submit on March 31, 2000. Rod noted that he wanted to focus today's discussion on four areas of concern mentioned at the last meeting; namely, offsets and substitutions, heights, open space, and residential uses.

Offsets and substitutions: Linda Haar began the discussion with an overview of the difference between offsets and substitutions. She explained that the MHP attempts to offset *impacts*, which are often difficult to measure. On the other hand, she noted that substitutions are quite measurable (example: shifting the height from 55' and 155') although the impacts generated by such substitutions may not be. For example, it can be determined whether the impacts of substitution heights would create shadow. Using the proposed height boundaries, the approximate area of shadow can be determined, but it still does not measure the *impact* of whether people will be discouraged or encouraged from frequenting that particular area as a result of the increased shadows. As a result, the balance of offsets and substitutions becomes somewhat subjective. Offsets are proposed for projects whose substitutions, particularly as they relate to height, produce impacts. In order to determine the impact of a substitution and its resulting offset, the city applies the concept of rough proportionality. This is similar to the process used in takings (eminent domain) which, although not an exact science, tries to approximate a rough proportion of value.

Valerie Burns commented that the concept of substitutions and offsets is important when thinking about benefits. She added that additional height requested as a substitution produces a private benefit which, regardless of impact, should be offset to ensure a public benefit. Linda responded that the state regulations are not opposed to private benefit, rather they serve to protect public benefit and thus are set up to provide mitigation measures if there is an *impact*, not just a private benefit.

Stephanie Pollack stated that benefits do matter since the area in the MHP is Commonwealth Tidelands and all the proposed projects are non-water dependent uses. The Waterways Regulations state that for non-water dependent uses on Commonwealth Tidelands, project approval is contingent upon a finding that private benefits are incidental to achievement of a public purpose/benefit. She added that if the group could define public

benefits, they could be incorporated as part of the MHP. The Waterways Regulations also state that substitute provisions in the plan should promote state tideland policy objectives and establish an analysis of differential objectives, and the MHP must include requirements to mitigate, compensate or otherwise offset any substitutions.

Jim Klocke stated that certain substitutions may result in better buildings and improved waterfront access than under Chapter 91. He reminded the group that regardless of Chapter 91, one of the goals is to create a neighborhood. He also stated that the state and city have committed to building the convention center and now must ensure that the surrounding district will complement and support the convention center activities. He cautioned against having all the hotel rooms located outside of the South Boston area, which would result in a transportation crisis. Jim also commented that promoting mixed-uses was good public policy and that public benefits should be balanced with private benefits.

Linda commented that the MHP tries to ensure that private property owners are not penalized by having to compensate above and beyond the offset. The plan has not finalized its specific basic requirements yet. At this point, Valerie requested that the group talk about offsets and substitutions in a way that is not negatively driven. Stephanie added that it is possible to achieve greater benefits through the MHP than with Chapter 91. Linda noted that everyone appears to be in agreement on these issues, now the language just needs to be drafted to reflect this. She asked Stephanie and Jim to assist with the drafting of this language.

Stephanie commented that sometimes it is difficult to figure out what can be addressed at the plan stage and what should be addressed at project review, but there has to be enough included at the plan stage for the group to feel comfortable with. She expressed concern that many issues are pushed into the project review stage and she requested that more be addressed at the plan phase.

A member of the audience, Dan Lynch, introduced himself as a spokesperson for Senator Lynch's Office. He questioned whether the City has actively involved the South Boston community in the planning process and asked where the transportation component of the plan was. Ann Chiacchieri responded that the MHP contains a section summarizing the Berger study. Linda added the MHP is not the document that provides transportation information, it is only one piece of the whole picture. There are several components to the whole process and the MHP does not approve projects, rather it approves an envelope and thus does not have to wait for the completion of the Berger study. She reiterated the fact that the document is only a draft — it has not been submitted to the state — in order to allow for public comment. Jim stated that there are two and a half weeks before it goes to the state and after the final submission, there will be additional public review and a public hearing. Rod added that the MHP is the next step of the PRP and does not approve any particular project. Each project has to go through review that includes transportation and other issues and the MHP only sets the envelope as far as specific heights, setbacks, open space, facilities of public accommodation, etc. Rod also commented that the MHPAC meetings are open to the public, community representatives have been invited and have

attended, and there has been a meeting in South Boston. Linda added that the MHPAC has met with the South Boston Design Committee and Kathleen Kenneally, designated as the contact person by the elected officials, has been to the meetings as well. There will also be additional public meetings in the neighborhood. Linda stressed that this is only the beginning of the public review process.

Vivien Li mentioned her concerns about the capacity and timing of the transportation element. She has concerns about truck movement, bus routes and the Transitway and feels uneasy approving a "generous" envelope without hearing about the transportation component. The conversation shifted to the subject of the MBTA briefing. Linda announced that the date of the briefing is scheduled for the April 5, 2000 MHPAC meeting.

Dan Lynch turned the discussion to the Fan Pier, which he commented is too large and too dense. He stressed the importance of having adequate information before proceeding. Linda responded that the City is not asking for any project approvals with the approval of the MHP.

A member of the audience, Diam O'Connell, commented that it seems unreasonable to move forward without the presentation by the MBTA since transportation, particularly the Transitway, is a key component. Linda responded that moving the MHP forward does not mean any specific approvals, rather it simply means moving forward to the public review process. It was decided that the City would try to reschedule the MBTA to present at the next MHPAC meeting if possible.

Shirley Kressel, a member of the audience, cited an article in the Wall Street Journal that states that Transitway funding is threatened by the Big Dig overrun. She said it also claimed that private developers in the area are planning to serve their needs with private shuttle buses, which could decrease the constituency for mass transit. She requested that the final submission date of the MHP be pushed back if the MBTA was unable to present until April 5, 2000.

Jamy Buchanan spoke about the importance of involving the community. She acknowledged that while the City has tried extremely hard to do so, the South Boston community does not feel listened to. She recommended that when the planning process turns to other areas there is a massive outreach and suggested finding a time for meetings that would better accommodate residents.

Height and massing issues: At the last MHPAC meeting, a concern was raised that the height spine in the MHP appeared closer to the waterfront than in the PRP. In response to this concern, Linda and Ann presented overlays of the height zones in the MHP and the PRP. The major differences between the two plans were: 1) the no-build zone has increased in the MHP, 2) the MHP allows higher heights closer to the water in a portion of the B zone, and 3) the MHP refines the PDA zone and caps its heights. Linda stressed the fact that the MHP does not exceed the PRP, rather it shifts the balance in favor of the no-build zone and tends toward the conservative side.

Valerie voiced her concern about the implication of height and setback for areas outside the jurisdiction. She stated that the PRP clearly puts the tallest buildings between Summer and New Northern and the MHP now has a 300' building envelope in C and D, 150' from the waterfront; in addition, the MHP also has some buildings at 250' - 300' on Old Northern Avenue. Linda responded that the MHP guidelines are still consistent with the PRP and the rest of the district is similar to the PRP. Stephanie commented that p. 103 of the MHP, which calls for generally the tallest along Northern Avenue, raised a red flag for her as it differs from the PRP. She asked whether this was a misstatement or change in policy. Linda responded that the PRP had buildings along Northern Avenue at 200', 250' and few at 300'. Stephanie also raised her concern that the written text says within 200' from the bulkhead, buildings are restricted to 75' and she noted some inconsistencies. Linda responded that she would look into it.

Steve Hollinger commented that Tom O'Brien told the (South Boston) community that there would be a 150' base height limit in the IPOD. He conceded that it is not necessary that the community should get everything it wants, but that there was a general confusion surrounding this discussion. The community had thought that the total height limit of buildings was 150', when in fact it was only a base height, and buildings could go up higher with a PDA designation. He noted that the PRP said that heights would go above 150' only occasionally in PDAs, which were supposed to be considered special areas. He questioned why the MHP differed from the PRP, raising heights from 150' to 250'. Linda responded that she could not attest to what Tom O'Brien had said, but that it was understood by all that heights could go higher than 150'. She stated that the South Boston community clearly understood this because they had not objected to higher building heights and instead used height as a basis to negotiate community benefits, which is why the city established the PDAs. She concluded that the bottom line is that the PRP shows areas of base heights at 150' and PDAs that allow heights of 200', 250' and 300'. The MHP pushes the buildings much farther back from the waterfront and although it may not be identical to the PRP, it actually results in a much broader and more accessible waterfront.

Rod turned the conversation to the issue of where height is allowed. He stated that heights greater than 150' in any area would result in offsets, so that height may not necessarily be a bad thing, particularly if it results in more open space and opening up view corridors. He voiced his concern for elements at ground level and wondered whether property owners behind Northern Avenue would want to build higher in order to match or exceed development on Northern Avenue. He also commented that he does not object to a few buildings of higher height (i.e. 300') in the area designated as a PDA in the PRP, but he would object to a wall of 250' buildings. Linda responded that both the PRP and the MHP treat the buildings outside the Chapter 91 area in the same manner. These buildings are not limited to a height of 150', but existing zoning is in place to ensure that building heights do not escalate.

Harold Sparrow questioned whether it would be possible to set a policy that achieves mutual benefits and creates compromise that increases open space and encourages

collaboration. He stressed the importance of developers and the community working together. Toni Pollak expressed her concern that the discussion was shifting to zoning when it should be focused on environmental impacts and the tidelands since the MHP does not deal with zoning. It was requested that maps be provided showing the whole harbor in order to provide context and illustrate connections.

Vivien noted that Figure 10-3 in the MHP gives Pier 4 a generous no-build zone, but questioned the 15' setback. She noted that the minimum Harborwalk setback is 12' and that she feels 15' is too narrow. She also questioned why there was no height on the proposed ICA site. Ann responded that there was no height labeled because there is no height substitution proposed, thus the building height is the regulation height of 55'. Vivien suggested that perhaps Parcel J should have a more generous water-dependent zone depending on the building heights. She also asked for clarification and further discussion of Figure 10-3. Linda stated that there is a required offset of a 30' Harborwalk on the cove side of the Pier 4 if a project requests a height substitution that varies from the proposed 55'. The MHP requires that the street wall be no higher than 75', which is clearly stated in the text but is difficult to depict visually. However, it will be noted more clearly on the maps in the final plan.

Valerie asked what the maximum floor plate of the tower component of a building on Pier 4 could be. Linda responded that on a 75' height base, the maximum floor plate is 25,000 square feet per floor. In comparison, the World Trade building is 33,000 square feet per floor and the Seaport Hotel is 22,000 square feet per floor. Valerie voiced her concern that the cumulative impact would be a wall close to the water and stressed the importance of openness between the water and the sky at the water's edge. Rod agreed with her, commenting that the entrance to the Fan Pier cove is a key area. He also noted the trend towards office over residential development, which ties into the transportation issues. He added that the justification for higher heights is supposed to be in order to create a neighborhood (as stated in PRP), but the development of only office buildings will not create a neighborhood. Stephanie noted that 4 – 4.5 million square feet of office space is to be built over the next ten years, however the timing of it is not discussed. She stated that there are ways to incorporate language that state the city's intent of meeting a balance between office and residential uses. She added that one of the major justifications for increasing height was to increase density, but that density of office space alone would not create a 24-hour neighborhood.

A member of the committee commented that the general shaping of proposed heights at Fan Pier cove is different than the general shaping pattern of heights of Pier 4. He said that the high zone is now pushed towards Summer Street and remains quite high, which seems to be a shift in logic graphically. Linda responded that Pier 4 and Fan Pier are two very geometrically different sites. Pier 4 is long and narrow and should thus have a pier type building similar to that of the building on Long Wharf. The large setback at the end is appropriate because it produces a large open space that can be flexible and accommodate various activities and access to the waterfront. Rather than spreading out open space throughout the pier, the large open space is concentrated at the end of the pier in order to produce a more useful space that relates better to the cove. Rod noted his approval of this

concept, commenting that Pier 4 is one of the few places in the city that has a panoramic view of the whole harbor.

Linda reminded the committee that there is no substitution for creating ground floor four-season uses, which must consist of more than just retail facilities. She commented that she sees the non-cove side of Pier 4 as a commuter/transportation side. She also stated that the MHP is not offering a precise site plan, but that the city does not want to see a street along the other side.

Linda and Rod concluded the meeting by stating that the city would try to reschedule the MBTA for the next MHPAC meeting. Discussion of the draft Municipal Harbor Plan and any issues of concern/interest would be continued at the next meeting.

The meeting was adjourned at 5:00 p.m. The next meeting is Wednesday, March 22, 2000 at 3:00 p.m. in the BRA Board Room (City Hall Room 900).

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

3/9/2000

Mr. Roderick McDonald, Chair
for distribution to:
The Municipal Harbor Plan Advisory Committee
Boston Redevelopment Authority
City Hall
Boston, MA 02201

Dear Municipal Harbor Plan Advisory Committee:

I wrote this letter to express my individual views; SAND members have not yet had an opportunity to review or discuss the DRAFT Municipal Harbor Plan (MHP). More comments may follow as the plan moves forward.

Open Space

My continued concern about open space is that the Municipal Harbor Plan does not adequately distinguish between publicly-owned open space and privately-owned publicly accessible open space. I expect that many members of society do not see a difference, after all, a park is a park. I want to let you know that many citizens do sense a difference. I can only explain that there is a much greater awareness of freedom on publicly owned land. Maybe it comes from an awareness that one persons right to be on public land can never be felt as a right granted by someone else.

It is difficult for me to accept that simply because the BRA indicates that the City of Boston does not have funds to invest in the creation and management of parks (as it did to create a convention center), the Municipal Harbor Plan advisory committee would align its document with this position, one that views privately managed land with public easement as a valid replacement for a publicly owned and maintained park.

The argument of property owners and the BRA is that the property is private and therefore it can not be provided back to the City without arduous eminent domain proceedings. With this Municipal Harbor Plan, the public is being asked to hand over billions of dollars in public rights (i.e. shadows over Boston Harbor, traffic impacts, air quality rights, views, noise, etc.) and has a tremendous opportunity to assert public rights including provisions for reclaiming public parkspace.

I would suggest that the Municipal Harbor Plan advisory committee envision a method for the creation of a City/State managed, publicly owned park system.

Land Use

My main concern regarding the DRAFT MHP is that some of the City's political and economic development objectives are stamped into this document and may impede the ability of the South Boston Waterfront to achieve the vision outlined in the BRA Public Realm Plan.

Broad public interest goals, including activation of the waterfront and establishing the BRA Public Realm Plan's vision of a waterfront neighborhood can only be achieved through residential development. Unfortunately, a critical mass of residential development in the South Boston waterfront will not be created if there is not public will — including the will of the Municipal Harbor Plan advisory committee. Developers find substantially more profit in hotel and office developments if given a choice over residential. Political leaders have opposed residential creation in the waterfront. And the BRA is averse to rezoning existing commercial areas for residential development. So, despite all the noise about the success of neighborhoods and the lack of housing in Boston, there has been little effort to create housing on the waterfront.

The Municipal Harbor Plan now shifts the burden of residential development away from Fan Pier and the northwestern corner of the waterfront envisioned by the Public Realm Plan. This concious shift may make the Public Realm Plan difficult, if not impossible, to achieve in the future.

While the BRA Public Realm Plan asserts that 5,000 - 8,000 housing units must be created to achieve a critical mass, the Municipal Harbor Plan suggests that these numbers may be achieved along D Street and in the Fort Point Historic Subdistrict. It is a fallacy to state that a critical mass of residential could develop in these two areas given the percentage of undeveloped property and the rapidly accelerating office conversions (acceptable in current zoning) in Fort Point. Based on potential land and buildings not in use for office space, Fort Point would have difficulty achieving 800 residential units over the next ten or twenty years. To achieve a critical mass of residents in the waterfront, residential development must occur throughout the western end of the waterfront, from Fort Point to Fan Pier.

These points are important in consideration of the DRAFT MHP because this document attempts to carve a few major height, density and open space allowances for development without the promise of fulfilling the residential objectives of the Public Realm Plan.

For example, the MHP is being tailored to allow for the approval of a 20-acre development on Fan Pier with only 450 residential units, less than half the number projected by the Public Realm Plan. Where will the remaining 3000-5000 housing units go in the waterfront? Is the BRA expecting the McCourt property to develop with all of the remaining housing numbers? If I am incorrect in these assertions, the answer to this question should be provided factually by the Municipal Harbor Plan — a document that may encourage office/hotel/retail developments which impede this mission.

Height and Density

The BRA Public Realm Plan did not pick heights and densities out of thin air — its proposed heights were determined after a 2-year assessment of environmental impacts and community needs balanced with realistic economic and development objectives.

I have asked the BRA and Spaulding & Slye on numerous occasions to justify the extreme heights and density of the Fan Pier proposal as supported by the Municipal Harbor Plan. Other members of SAND have asked for the Municipal Harbor Plan to include shadow projections of its own proposed heights as they are cast across Boston Harbor. These requests have been rebuffed with cursory responses, and the DRAFT MHP does little to justify its height, density, shadow and land use allowances.

The heights and density proposed by the DRAFT MHP are twice that suggested by the Public Realm Plan (see PRP p68, p106), and twice the 1.5 million sf recommended by Mayor Menino's South Boston Waterfront Committee in 1997. To justify its variation from the Public Realm Plan, the DRAFT MHP simply states:

“...higher heights are necessary to achieve the density needed to create a new neighborhood.” [p121]

“The higher heights will create the density that will help to realize the City's goal of creating a new neighborhood...” [p121]

“Also, like the Fan Pier, a certain density is required in order to create a new neighborhood.” [p128]

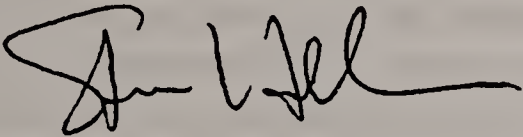
These statements are the only justification provided in the MHP for the height and density allowances. They are bold statements, but are only hold true if the developments actually contributed to neighborhood development. Unfortunately, because the DRAFT MHP does not forecast land uses, the reader is left to believe that the increased densities will help an evolving neighborhood.

In reality, the Fan Pier project moving through approvals with this MHP does not at all suggest an urban neighborhood— it suggests four massive office towers (4000+ office workers), two large hotels, ground floor retail and 450 luxury condos. This is a proposal with a 20-acre density of office workers to residents of 10 to 1 — Kendall Square by any standard.

I am aware of the many unwritten justifications for these provisions in the Municipal Harbor Plan. I am aware that City leaders would like to leave this effort as part of a legacy; that Fan Pier is a \$1.2 billion project and therefore would be helpful to the economy and the trades. But, long after these benefits are derived, massive office buildings and hotels will dominate the edge of Boston Harbor and people like me will be asking, "Why?"

I appreciate your consideration of these points during development of the final MHP.

Regards,



Steve Hollinger
50 Melcher St.
Boston 02210
338-2222

cc: file

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

March 8, 2000

Discussion of the Draft Municipal Harbor Plan

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in the BRA Board Room by Committee Chair, Rod Macdonald.

Rod opened the meeting with the announcement that the Draft Municipal Harbor Plan became available last Friday. However, since not everyone had a chance to go through it, he asked Linda Haar to summarize/highlight important aspects of the plan as it is a complex and lengthy document. He then asked that the discussion focus on the positive aspects of the draft, possible gaps that might exist, and suggestions for improving the document. The goal of today's meeting is to develop a working list of issues for further discussion at the next two meetings.

Introduction:

Linda began by thanking the committee and the audience for their participation. She stated that although the draft may not contain everything that everyone wanted, many of the ideas brought forth at the meetings have been incorporated into the plan. Again, she cautioned everyone that this document is a preliminary draft and that it is not the city's official submission to the state. The city issued this preliminary draft in order to get initial comments and feedback; there will also be a formal public review process after the official submission.

Linda stated that the Municipal Harbor Plan (MHP) is intended to implement the Public Realm Plan (PRP). The MHP stays within the regulatory parameters of the PRP, in terms of height, etc. The MHP deviates from the PRP only where it is more conservative and restrictive. As requested by the committee, the MHP contains a great deal of background which is integral to understanding the plan itself. The plan is based on the same five planning objectives as the PRP and stresses planning within the context of the harbor as a shared natural resource.

Linda then discussed offsets and substitutions. She stated that the MHP identifies the offsets that have been brought before the committee. The MHP includes baseline requirements, which will be required of all property owners simply because they are building on the waterfront. The MHP also includes offsets for substitutions, which can be used to ensure that interior space is more than just facilities of public accommodation, as well as to create a four-season public space that is usable to residents of Boston, not just visitors and tourists. The MHP requests open-space substitutions in the sense that open space can be combined among adjacent parcels rather than simply requiring 50% open space on each smaller lot. The hope is that this will create a greater space overall. In addition, the MHP enhances the state's open space requirements by excluding existing

streets, surface parking and limiting the percentage of open space that can be roadway to 20%.

Linda referenced the fact that the MHP includes an option under the offsets to contribute to the Waterfront Public Access Improvement Fund. This fund will be used to improve access to the Harbor and the Harbor Islands and to connect the Harbor to other parts of the city. She stressed that the fund does not take the place of required offsets.

Linda discussed the fact that the plan also focuses on specific geography, from the Fort Point Industrial area to the Fort Point Historic waterfront to the Inner Harbor, including the Barking Crab parcel, Fan Pier and Pier 4. Although the Massport parcel is not subject to the MHP, the document lays out a context for the entire area. It puts height zones on the Fan Pier that are more restrictive than the proposed scope. Although the MHP focuses more on Fan Pier than Pier 4, Linda stated that it is important to focus on the substitutions proposed for Pier 4. At the end of Pier 4, the height has been lowered, there is a 50% open space requirement, and the set back has been increased to 200' in order to provide flexibility for large gatherings and open-space. This public space is particularly important because it is surrounded by water on three sides. In addition, she stressed that the relationships between the two piers and their relationship to the Cove should be examined in order to ensure the creation of a great public space on the waterfront. Overall, the MHP attempts to ensure that public space is usable, friendly and psychologically and visually open. In terms of programming, the goal is to make the spaces flexible and avoid over-programming.

The city is working on making water transportation facilities part of the program. In terms of understanding the process, Linda articulated that today and the next two meetings would be devoted to discussion of the draft. The BRA intends to submit a final MHP to the state on March 31, 2000, after which there would be two required public meetings (one has already taken place). The plan also calls for public participation in the project review stage.

At this point, Rod asked the committee members and audience to identify the areas of the MHP that are the most positive and that need the most improvement. He requested that everyone give only a brief summary at this time in order to allow everyone an opportunity to speak. The group would then discuss these issues in a systematic manner and in greater depth.

Committee Comments:

Stephanie Pollack posed a question regarding how offsets are being treated. She asked whether offsets are required in all cases or only after project-specific negative impacts have been determined. She cited that the draft MHP used ambiguous language about substitutions, in some places referring to offsets as required "always" and in others "if there is a negative impact".

Valerie Burns commented that she liked the plan most where it is in keeping with the PRP. She was particularly pleased with the way the Boston Wharf and Fort Point Channel are treated and are in keeping with the PRP vision of a mixed-use neighborhood. In other places, however, she thought that there were some variances from the PRP. She referenced Summer Street and new and old Northern Avenues and said the plan was somewhat confusing in its treatment of Northern Avenue (unclear whether references were to old or new). In addition, she had a question about whether limiting streets and roadways to 20% referred to 20% of the 50% required open space or 20% of the total project area (100%). She also had concerns about the ICA project and questioned the height and setback substitutions.

Rod brought up the following concerns: 1) using the vertical zoning concept for increasing the residential component, specifically on Fan Pier and Pier 4; 2) how the determination of two hours as the criteria for requiring offsets in the Shadow Protection Zone was arrived at; 3) the concept of aggregated open space between owners; 4) the reconfiguration of the water dependent use zone where setback requirements were increased in some areas and reduced in others, and 5) the pedestrian entrance to Fan Pier Cove and where heights are situated in relation to pedestrian flow. He noted his approval of Chapter 7 regarding baseline requirements.

Jim Klocke supported the concept of aggregated open space, which should be encouraged where possible. He commented that additional creative thinking about these issues would lead to significant large-scale open space.

Patty Foley stated that the draft MHP reinforces the Mayor's commitment and the city's recognition of the importance of getting residents to Boston Harbor and the Harbor Islands. She requested that there be a more detailed discussion around creating a special destination with a focus on sharing the harbor with the citizens who paid for its clean-up.

Vivien Li commended Sections 7.2 and 7.3, the guidelines and standards for the watersheet, as an excellent synthesis of the PRP and committee discussions. She had questions about 10.3 and the commentary about floor plates and heights, which she found confusing. In addition, she had concerns about the sewer and transportation systems and hoped for a larger discussion about land transit.

Steve Spinetto praised the plan as perhaps the first document to incorporate disability standards and create an environment that works for everyone. He raised a concern about the difficulty of keeping the buildings in scale with the rest of the city, given the size of the parcels and the fact that most have single owners.

Jim Doolin commented that open space aggregation should be as flexible as possible to achieve the best possible results and suggested that the group look at the possibility/feasibility of structure parking as an appropriate transitional use.

Erin Gordon stated that the MHP did not contain a lot of surprises and was reflective of and responsive to the process to date. She commented that the concept of transportation is

essential and that it is particularly important to focus on what is actually going to happen rather than on what is planned.

Joy Conway commented that she would like to see densities and heights that are both feasible and developable in order to ensure that building is actually possible.

Brad Swing raised concerns about: the cantilevered portion of the Harborwalk, whether floating barges are appropriate, and the importance of maintaining the integrity of historic seawalls.

Stephanie Pollack echoed concerns about the assumption that the MHP is consistent with the PRP. She noted that the height spine has moved from between Summer Street and New Northern Avenue to Old Northern Avenue. She commented that the height zones are taller closer to the water than those specified in the PRP, although the height overall may not be taller. She then requested an overlay of the figures from both plans in order to compare the two and discern where changes had been made. She also stressed that the impact of all four physical parameters (setback, height, etc.) be looked at for cumulative rather than individual effect. She commented that the analysis mentioned in the Secretary's scope was to be discussed in the MHP, but then the MHP states that it is to occur during project review and on a project-by-project basis.

Lou Casagrande raised a concern regarding the planning of Fan Pier cove, which he cited as a critical destination, and the need to coordinate it with Pier 4. He found that the plan was unclear with regards to what coordination mechanisms will be in place (other than the Waterfront Public Access Improvement Fund) to maximize coordination and sustain the vision.

Astrid Glynn commented that the plan is at a difficult stopping point between vision and reality. The transportation plan has great vision, but little connection to reality. She questioned the level of funding and commitment. Astrid also cautioned against getting caught between expectations of land-use planning and transportation.

Jack Wiggin continued the discussion of substitutions and offsets by stating that what the plan is trying to achieve is correct. He only questioned whether the philosophy and mechanism outlined in Chapter 91 and the MHP would ensure the approval of the plan. He also had concerns that the MHP might not ensure all possible means available to the city to get public benefits that would have been provided for under Chapter 91.

Constance Budorow commented that neither the shadow studies nor the underlying massing studies were included and suggested that they should be. In addition, she hoped that the group would talk further about the maintenance standards that were included as an appendix.

Audience Comments:

Bruce Berman commented that the MHP clearly reflected that the city had listened to and

responded to the committee and the audience. He supported the idea of changing the term of the MHP from five to ten years as suggested in the plan. He suggested that since the transportation plan does not serve everywhere, the plan should encourage independent carriers or licensed operators to support water transportation. He also advocated the placement of telephones near the waterfront.

Steve Hollinger requested justification for the major differences between the MHP and the PRP. He referenced several dissimilarities in the two plans with regard to heights, setbacks and residential uses and asked that there be justification for allowing deviations from the PRP. He commented that under the MHP the Fan Pier office/worker ratio would be ten to one, resulting in an area that would be "dead" during the weekends. In addition, he stated that the plan called for the location of new residents in the Wormwood district, but that the area simply had no more room for residents other than the McCourt site. Finally he commented that 150' heights are too high for Fan Pier, because at ground level pedestrians would not be able to notice graduated increases in heights.

Discussion:

Rod stated that there would be time to address additional issues and comments, but at this time the group should start to talk about the issues that had been raised so far. He commented that it would be helpful for the BRA to expand on substitutions and offsets, which were identified in the discussion as a confusing issue to several members of the committee and audience. It was determined that definitions and further clarification would be provided by Linda at the next meeting.

Stephanie raised another concern that the impact analysis would not occur until the MEPA and Chapter 91 review phase, which could be several years from now. She asked for clarification on what will get fixed in the plan and what the results of a disjunction of time between the plan and the actual analysis would be. At this point, Elizabeth Grob stated that it is difficult to envision substitutions without knowing the particulars of each proposal. Vivien Li also commented that her organization (The Boston Harbor Association) closely monitors project compliance with Chapter 91 regulations. In addition, she cautioned that offsets and corresponding substitutions be done at the same time, because the people involved in a project often change. Lou stated that it could take 20 years for development to occur. Thus, he stressed the importance of putting in the infrastructure for public access to avoid a piecemeal effect. He questioned how to accumulate all the offsets and get public priorities built. He also commented that the coordination of public priority was unclear in the MHP. Timing of offsets should be addressed and coordinated so that there is no slippage in implementation and execution.

A member of the committee requested that Greg Carrafiello speak to the issue of timing issues. Greg stated that the analysis does not occur at the final stage, rather offsets are identified, articulated and instituted early on in the process and then contracted as part of Chapter 91 review. Greg also commented that the public benefit (offset) would run concurrent to the private development.

Stephanie suggested that public benefits should be looked at on a district-wide level rather than on a parcel by parcel basis in order to establish area guidelines and priorities for the future. She requested that the MHP include an overview of the public access network.

Rod turned the discussion to open space areas and pedestrian access with regards to how they are treated under the plan in terms of percentages, exclusions, etc. Valerie commented that she was hoping that the plan would state where the larger parks would be located and that the larger parks could be an opportunity for substitutions.

The discussion shifted to the nature of privately owned waterfront land as public trust land and what this means in terms of development and planning.

Jamy Buchanan commented that the placement of open space should be identified as early as possible, particularly for recreational uses, in order to determine if and/or how the city should acquire it.

Rod concluded the meeting by stating that the discussion on these issues and any others of concern/interest would be continued at the next meeting.

The meeting was adjourned at 5:00 p.m. The next meeting is Wednesday, March 15, 2000 at 3:00 p.m. in the BRA Board Room (City Hall Room 900).

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

COMMENTS MADE BY MEMBERS OF COMMITTEE AND AUDIENCE AT MEETING ON MARCH 8, 2000 REGARDING THE DRAFT MUNICIPAL HARBOR PLAN

Offset/Substitution Issues

- How are offsets are being treated?
- Are offsets required in all cases or only after project-specific negative impacts have been determined?
- Will the philosophy and mechanism outlined in Chapter 91 and the MHP ensure the approval of the plan?
- Will the MHP ensure access to all possible means for the city to get public benefits that would have been provided for under Chapter 91?
- Importance of putting in the infrastructure for public access to avoid a piecemeal effect. How do you accumulate all the offsets and get it built?
- Coordination of public priority is unclear.
- Timing of offsets needs to be addressed.

Open space requirements

- Does limiting streets and roadways to 20% refer to 20% of the 50% required open space or 20% of the total project (100%)?
- Where will the larger parks be located?
- Could the larger parks be an opportunity for substitutions?
- Further discussion re: concept of aggregated open space between owners.
- The placement of open space should be identified as early as possible, particularly for recreational uses, in order to determine if and/or how the city should acquire it.

Municipal Harbor Plan versus Public Realm Plan

- The height zones appear taller and closer to the water than those specified in the PRP, although the height overall may not be taller.
- The treatment of Summer Street and new & old Northern Avenue. The spine of height has moved from between Summer Street and New Northern Avenue to Old Northern Avenue.
- Provide an overlay of the height figures from both plans in order to compare the two and discern where changes have been made.
- Justify differences/deviations between the MHP and the PRP, particularly with regard to heights, setbacks and residential uses.

Issues requiring clarification

- Unclear in some places whether references are to new or old Northern Avenue.
- Concerns about the ICA project and the height and set back substitutions.
- How was the determination of two hours as the criteria for requiring offsets in the Shadow Protection Zone arrived at?
- Justification of the reconfiguration of the water dependent use zone-increasing the setback requirements in some areas and reducing them in others.
- Clarification of Section 10.3 and the commentary about floor plates and heights.
- Timing issues: the impact analysis will not occur until the MEPA and Chapter 91 review phase, which could be several years from now. Clarify what will get fixed in the plan and how the disjunction of time between the plan and the actual analysis will be resolved.

Suggestions/Areas to be discussed further

- Vertical zoning concept used for increasing the residential component (Fan Pier and Pier 4);
- Pedestrian entrance to Fan Pier Cove and where heights are situated in relation to pedestrian flow;
- Creating a special destination with a focus on sharing the harbor with the citizens who paid for its clean-up;
- Carrying capacity of sewer and transportation systems;
- Larger discussion re: land transit;
- The difficulty of keeping the buildings scale with the rest of the city, given the size of the parcels and the fact that most have single owners;
- The possibility/feasibility of structure parking as a transitional use (Massport parcels);
- Densities and heights that are both feasible and developable to ensure that people are actually able to build;
- Cantilevered portion of the Harborwalk;
- Whether floating barges are appropriate;
- The importance of maintaining the integrity of historic seawalls;
- Looking at the impact of all four physical parameters (set back, height, etc.) for cumulative rather than individual effect;
- The analysis mentioned in the Secretary's scope was to be discussed in the MHP, however the MHP states that it is to occur during project review and on a project-by-project basis;
- Coordination of the planning of Fan Pier cove with Pier 4;
- Coordination mechanisms in place (other than the Public Access Fund) to maximize coordination among owners/parcels and sustain the vision;
- Level of funding and commitment for the transportation plan;
- Inclusion of shadow studies and underlying massing studies;
- Additional discussion re: maintenance standards issues;
- Residential component of the plan, particularly as it relates to the Wormwood district;
- Since the transportation plan does not serve everywhere, independent carriers or licensed operators should be encouraged to support water transportation;
- Place telephones near the waterfront;
- Look at public benefits on a district-wide rather than parcel by parcel basis;
- The MHP should include an overview of the public access network.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

February 16, 2000

**Presentations: Fort Point Channel Working Group, Maintenance Working Group
Introduction to Municipal Harbor Plan**

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in the BRA Board Room by Committee Chair, Rod Macdonald.

Rod opened the meeting with announcements. Several handouts were distributed to the group: an agenda, revised schedule, meeting minutes from the February 2nd meeting, the working group summaries, and the draft MHP Table of Contents. Linda Haar made an announcement that at a recent Municipal Research Bureau luncheon Mayor Menino spoke about several projects, including the Fan Pier development, and gave specific recommendations for the development teams to incorporate into their plans. Linda noted that most of these comments were consistent with many of the suggestions the MHPAC had made. She then asked Kyle Warwick to give a brief presentation at the next meeting showing how the design team had responded to the Mayor's issues. Kyle agreed to do so, but cautioned the committee that these changes would not address issues in the draft Municipal Harbor Plan, since it has not yet been released, but would instead serve to help the group visualize how guidelines and recommendations are incorporated into actual designs.

Presentations:

Fort Point Channel Working Group Report: Beth Nicholson presented the Fort Point Channel Working Group's Report. Handouts were distributed summarizing the goals and guiding principles and possible structures, uses and programming. She first described the wide range of speakers who had addressed the group, speaking on issues ranging from transportation to sediments in the Channel and water quality. Then the group engaged in brainstorming sessions in order to determine possible uses, structures, and activities for the Fort Point Channel. Beth asked that the larger committee provide feedback and responses to the list generated by the working group. Finally, she spoke about the group's future steps, which include refining and defining appropriate uses and structures by basin, resolving or clarifying the discussion about the Harborline and bulkhead line, and addressing the issue of funding. In addition, the BRA has requested funding for design work with respect to the Fort Point Channel. Beth concluded the report with two reminders: 1) the Waterfront Center presentation is scheduled for March 2, 2000 from 2:00-4:00 p.m. and 2) the working group's meeting time has changed to 2:00 p.m. (every other Thursday).

The first question was in regards to the cantilevering of the Harborwalk at the Gillette property. Ann Chiacchieri responded that the CA/T is cantilevering the Harborwalk at the Gillette property out of necessity, but that they are trying to ensure that the rest of the Harborwalk is along the water. A question was raised about the casting basin, however the

working group has not yet addressed the issue. Then a concern was expressed about the possibility that Gillette may purchase and expand on land that was designated for a residential, mixed-use neighborhood in the Public Realm Plan. It was stressed that design and buffering would be particularly important in neighborhoods where residential uses abut industrial or commercial uses in order to minimize incompatibility.

The committee agreed that due to the unique character of the Channel, the notion of flexibility in design and uses is essential. Lou Casagrande commented that the Children's Museum wants their planning process to be part of and complementary to a larger plan. He also stressed the importance of linking the great number of waterfront attractions in a seamless and affordable manner. Another committee member expressed a hope that the different basins are developed in such a manner that each one has a different character. Rick Dimino suggested that there should be a common, linking theme for the area that integrates the notion of destination and active uses into the design. A member of the audience suggested establishing public moorings, for which a small fee would be charged for overnight or short stays.

There was some question about whether programming would be specified in the Municipal Harbor Plan. Linda Haar responded that the MHP would not go into the level of detail of the FPC activation. The MHP will implement the physical infrastructure that sets the stage for activation; it will also provide an opportunity to flush out these ideas and identify a funding source to implement them. At this point, Rick raised the question of how to expedite the public investment/process without becoming encumbered by the regulations. Linda stated that the MHP itself will help expedite things by looking at the connections and laying out the plan. The discussion turned to the Congress Street Bridge, the construction of which is stalled due to a lack of state funding, despite the fact that the city has completed the design work and the public process. Rod suggested that the group put together a draft of a letter to the state in order to apply pressure and encourage action. Ann wrapped up the discussion by telling the committee that the working group's report is a work in progress and comments may be submitted via email or phone or by attending a meeting.

Maintenance Working Group Report: Valerie Burns presented the Maintenance Working Group's Report, which included baseline maintenance standards for spaces that are to serve the public realm, but which are contained on the site of private development. The group identified the need for a maintenance plan for each development, based upon the maintenance specifics and needs that would be required. They recommended that each maintenance plan be accompanied by an executed contract and an identified funding source. In addition, they recommended that a public realm management committee be established as a non-profit, similar to that of Rowes Wharf, which could serve as a monitoring committee and a way to share maintenance responsibilities. The group also advocated a partnership of waterfront property owners to promote a safe, healthy, and navigable edge of the Harbor. They referenced Post Office Square, Copley Plaza, Boston Common and Christian Science Park as good examples/models.

The group addressed the fact that trash is both a land and water issue. They advocate year-round street cleaning, with greater frequency during the months of April to October. In terms of dog waste, the group advocated the placement of disposal containers and bags for owners in specific locations, similar to those in the M Street Park. One committee member suggested the possibility of early trash pick-up during construction in order to limit overflow and excess trash in the area. At this point, Linda stated that maintenance requirements would be placed in the section of the plan that calls for standards and enhancements. These maintenance requirements set standards and coordinated efforts above and beyond those established through Article 80 and Chapter 91. Members of the committee voiced support for comprehensive maintenance guidelines.

Vivien suggested looking at Rowes Wharf as an example – the Rowes Wharf Association pays into a fund that subsidizes water transportation each year. Valerie responded that the direct applicability of that example is unclear because the regulations have changed since that association was established. At this point, the issue of policing and security was raised. Linda responded that there would not be a Harborwalk police force, rather private property owners would be responsible for security measures on their own properties. An audience member raised the concern that property owners might limit access to the public portion of private properties under the guise of enforcing security. Linda assured the group that the public portion of the private property is a public easement and is required to be open to the public. As a result, the owner will not be allowed to restrict access to the public space.

Draft Municipal Harbor Plan:

A draft of the Table of Contents was handed out and Linda announced that the BRA's objective is to have the draft completed by March 1, 2000. Although not required to distribute a draft version, the BRA opted to do so before the official submission in order to increase public participation. The official submission of the plan must also undergo the public review process. Linda stressed that the chapters on page two of the table of contents are the important, substantive part of the Municipal Harbor Plan. These sections address baseline requirements and guidelines, enhancements, universal access, maintenance standards, substitutions and offsets. As each specific project arises, it will be reviewed for its particular impacts and offsets through Article 80 and Chapter 91 review. As a result, the language for specific proposals will be quite detailed whereas the language for parcels without specific proposals will be quite general. Linda emphasized the fact that the BRA is not seeking a lot of substitutions, rather they want to reconfigure not decrease setbacks (with some exceptions) in order to maintain the character of the area and enhance facilities of public accommodation.

One member of the committee requested a map of the whole area, not just the South Boston piece of the waterfront, in order to identify industrial and marine uses and look at the Harbor as a whole. Questions about the committee's role followed. Linda stated that while all groups are welcome and encouraged to participate and express their views, the committee is advisory in nature and ultimately it is the responsibility of the public agency to submit the final plan. This plan may not reflect the ideas of every single person nor does it imply that everyone agreed to all of its components. The purpose of the committee

meetings is to ensure that this is a truly participatory process. It is then up to the state to decide whether the Municipal Harbor Plan is adequate and representative. Linda concluded the meeting by stating that the draft Municipal Harbor Plan will be mailed out and that people who are not on the mailing list should sign up in order to receive a copy.

The meeting was adjourned at 5:00 p.m. The next meeting is Wednesday, February 23, 2000 at 3:00 p.m. in the BRA Board Room (City Hall Room 900).

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

Sara Wiesel

From: Shirley Kressel [skressel@tiac.net]
Sent: Friday, February 18, 2000 3:46 PM
To: sara wiesel
Cc: linda haar; valerie burns; vivien li; seth kaplan; beth nicholson
Subject: MHP AC notes correction

And Sara, in the most recent meeting notes, please add my comment that:

Private security guards instead of public police, and extremely elaborate "landscaping" and maintenance standards, will tend to produce an exclusive and privatized environment, and one that will heavily indebt us to developers who will "consent" to groom and protect their grounds in return for enormous offsets. We should envision a decent, public-standard waterfront space, ample in capacity, sturdy and simple enough to withstand enthusiastic and frequent public use, not precious corporate "landscaping."

As a landscape architect with much experience with private "public" space, I recommend strongly that the City of Boston take control of these spaces, either by ownership (takings would be much less costly if the open-space area were zoned un-buildable) or by some form of easement providing for public policing and maintenance control, and truly integrate this invaluable waterfront, at last, into the city open space system. There is no private public space that remains truly public for long; this bitter lesson has been repeatedly taught by the 530 New York City "zoning bonus" plazas, which gave developers millions of extra-zoning square feet of tower construction, but have eventually become either privatized or abandoned. Anecdotal experiences about the most oft-cited "models" in Boston, including Rows Wharf and Post Office Square, begin to tell a story of exclusion as well. We delude ourselves to think that, if the private sector manages this waterfront resource, it will be as open to the kids from Roxbury, usually cited as potential new beneficiaries of the so-called "Silver Line" (joined to the Transitway), as it will be to white professional office workers, condo owners, and tourists. Already, Downtown Crossing is the subject of a Business Improvement District effort, and the Artery Business Committee is encouraging consideration of a blanket of BIDs across the newly "re-invested" waterfront. There is a Gresham's Law of private "public" space; if there is any ambiguity, the private always drives out the public.

We must get over the reflexive assumption that the public sector is too poor, or too incompetent, to provide public goods and services; it is not true. The new developments in Boston will generate hundreds of millions of dollars yearly in taxes. We should use those to nurture our public realm. We should leave no less to our grandchildren than was left to us by the creators of the Commonwealth Avenue Mall, the Public Garden and the Boston Common, the Charles River basin and the other great, and truly public, open spaces that help keep Boston one of America's few "livable cities."

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

February 2, 2000

Presentation of Report from Civic Events Working Group, BRA's Inner Harbor Shadow Study Continued

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in the BRA Board Room by Ann Chiacchieri.

Presentations:

Civic Events Working Group Report: Harold Sparrow presented the Civic Events Working Group's report. Handouts were distributed summarizing the group's findings, which identified 1) why civic events were important to the South Boston Seaport neighborhood, 2) what other communities are doing, and 3) possible ways to implement them. Harold stressed that what they were presenting was a work in progress and by no means a final draft.

The group identified the importance of increasing civic enjoyment and opportunities in the South Boston Seaport Neighborhood. Civic events define and bring together a neighborhood by celebrating its history and tradition, as well as engage other city residents and tourists. In order to determine what types of events would be feasible and most successful in this neighborhood, the working group studied seaport events and festivals in other places, including Rhode Island, Connecticut, Florida, and Canada.

The presentation also considered ways to finance civic events. The working group researched other entities that have carried out similar endeavors in order to identify possible methods of financing. The following alternatives were proposed: mandatory assessments deposited in a perpetual fund/trust managed and established by the city or a public foundation, such as the Boston Foundation; and the establishment of a Business Improvement Area (B.I.A.). These were offered as possibilities, but the emphasis was placed on finding the most feasible and viable way to raise/manage funds (ranging from five to ten million dollars) for this particular neighborhood.

In closing, Harold identified the advantages to establishing a community event in the South Boston Seaport Neighborhood as symbolic and political statements of commitment to the event and the community that would benefit the community, area businesses, and Boston as a whole. He concluded with two final questions:

1. How does the deal get done?
2. Has anybody here participated or been involved in a similar process?

Discussion:

The discussion began with the concern that planned events serve both visitors and members of the community. Several people stressed that, first and foremost, civic events should be *from* and *for* the community in order to induce a sense of ownership and pride in the neighborhood. The resulting event could then evolve into one that appeals to tourists and

visitors. The Lowell folk festival was given as an example of this type of event -- it started out as a community festival and evolved into a visitor experience.

The discussion then turned to the magnitude and methods of financing. One area of concern was the competing interest of raising money through corporate sponsors and keeping the events non-commercial, but still free of charge. In addition, several committee members voiced their objections to the possibility of utilizing mandatory assessments on area businesses as a way to finance civic events.

The logistics of planning civic events were discussed, focusing specifically on timing and staffing. It was suggested that the committee could look at the existing calendar of events and initially incorporate the South Boston Waterfront into existing celebrations, building upon traditions/resources that are already in place, such as Harborfest, SailBoston, and Maritime Day. These festivals include a variety of activities including water-related events, food retail, antiques tent, family-oriented entertainment and activities, hayrides, and a mixture of charge and free events. Lou Casagrande also proposed the idea of a linear festival linked to downtown and other areas of the city. It was determined that a full time staff would be necessary for the planning and implementation of such events. Vivien Li suggested that the neighborhood should draw both residents and tourists year-round, rather than promote the idea of Boston as only a summer city. Another member cautioned against over-programming, which sometimes results in inaccessibility and over-crowding.

A member brought up the issue of priorities and suggested that the group should be primarily focused on infrastructure, pedestrian flow, and accessibility rather than civic events. Stephanie Pollack suggested that some of the physical issues should also be addressed, such as how large the gathering place should be and whether to use one of the permanent resources (such as the ICA) to orient/structure the type of event. Several questions were raised: Is it possible to determine the basic accessibility of the site? Would the public realm plan support major festivals? Could the site accommodate a waterside amphitheater; if the committee and community deemed this a desirable use?

The discussion was concluded by Harold, who summarized the tasks for the future as: 1) resolving the tension around offsets versus mandatory assessments, 2) balancing priorities of time and financing between infrastructure and events, and 3) addressing the question of size.

The BRA's Inner Harbor Shadow Study Continued: Kairos Shen began the presentation by displaying an outline of the Shadow Protection Zone in the Inner Harbor subdistrict, which consists of two zones: land (no-build zone and the new water dependent-use zone as defined by the MHP) and water. He also gave the dimensions of these areas: six or more acres included in the no-build zone including the parks built near the federal courthouse and approximately 15 acres included in the water zone. Kairos then displayed various shadow simulations incorporating proposed development in hourly increments on May 5th, June 21st, September 21st, and October 23rd between the hours of 9 a.m. and 4 p.m.

During the presentation, several committee members requested definitions and explanations in writing due to the technical nature of the study. It was determined that this would be included in the meeting minutes to aid in the comprehension of the Shadow Protection Zone.

- **Shadow Protection Zone** – This is the area that is considered the most sensitive to net new shadows above the limits set by Chapter 91. Areas that are included in the Shadow Protection Zone are areas, both on land and water, that are included in the water dependent use and reserved for open space and other public uses. Within the Inner Harbor subdistrict, areas are focused around the new Federal Courthouse Park, the open space and Harborwalk along Fan Pier Cove and Fan Pier. The Shadow Protection Zone follows the model of the Boston Common in that shadows that are considered significant are those that are of a duration of more than two hours per day. The Shadow Protection Zone proposed in the MHP does not prevent the creation of new shadows. It requires that every new development proposal in the area be evaluated for shadow impacts. Any net new shadow for more than two hours per day above and beyond the Chapter 91 envelope is required to provide offsets. There may also be areas within the Protection Zone that are more sensitive than others and offsets would need to reflect the greater degree of impact.

During the discussion of the Shadow Protection Zone, Linda Haar stressed that regardless of the components of the Municipal Harbor Plan, all development is still subject to environmental, including shadow and wind, analyses through the Article 80 MEPA and Chapter 91 review processes. The purpose of the Municipal Harbor Plan is to establish the maximum envelope.

The following question was raised: what should be done when a positive, public amenity creates a shadow (i.e. "offset for an offset"). The discussion then turned to the issue of shadows as both desirable and undesirable, depending on the time of year and personal preferences. It was requested that the month of April be included in the simulations. Linda noted that although the focus of the Shadow Protection Zone has been on the inner harbor to date, there are plans to expand this zone along other areas of the waterfront, i.e. Fort Point Channel. She also noted that the first objective in conducting shadow and wind analyses for a specific proposal would be to minimize impacts. This can be accomplished in several direct ways for wind impacts. However, because of the solar orientation of the Inner Harbor subdistrict, any development that provides an urban density will create shadow effects. We are designing a district that will serve a variety of purposes for the public and in doing so we must balance and take into account a large number of issues.

Removing height from a site may negatively affect the variety and density of uses and ability to build and sustain the public infrastructure needed to activate the waterfront. The purpose of the offsets is to counter balance these effects. In response to the question of whether a public amenity creating a negative shadow impact should be offset, Linda indicated that in her view, if it is a significant public amenity the shadow impact may be a necessary trade-off and should not require an offset.

Closing:

The committee discussed the possibility of reducing the frequency of meetings until the Municipal Harbor Draft is available for review. It was determined that next week's meeting (February 9, 2000) would be cancelled. Beth Nicholson stated that The Waterfront Center is coming to Boston to give a presentation and summary of their experience and suggestions

pertaining to waterfront development. The committee will be notified once the time and date of the presentation is confirmed. The agenda for the next MHPAC meeting will include presentations from the Fort Point Channel and Maintenance Working Groups.

The meeting was adjourned at 5:00 p.m. The next meeting is Wednesday, February 16, 2000 at 3:00 p.m. in the BRA Board Room (City Hall Room 900).

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

Note: The **Waterfront Center** presentation has been scheduled for March 2, 2000 from 2:00-4:00 p.m. in the BRA Board Room (City Hall Room 900).

Sara Wiesel

From: Shirley Kressel [skressel@tiac.net]
Sent: Friday, February 18, 2000 3:46 PM
To: sara wiesel
Cc: linda haar; valerie burns; vivien li; seth kaplan; beth nicholson
Subject: MHP AC notes correction

Sara, please add to the summary of the meeting before last of the MHP Advisory Committee, after the description of the Sparrow sub-committee report:

Shirley Kressel, a landscape architect/urban designer and a member of the public, cautioned the Advisory Committee that the "need" for intensive programming to "activate" the waterfront is an unnecessary and self-imposed burden. The Committee, hoping to generate genuine, spontaneous community celebration, is looking at models that produce primarily packaged tourist-oriented entertainment. The creation of what bodes to become a corporately sponsored waterfront theme park would merely create heavy financial commitments to be met by developers, and these obligations would be used to justify "offsets" of huge over-development, which would make the waterfront area a far less pleasant place for people to come to enjoy the water itself. (And in any case, enforcing these obligations, which are by no means as permanent and physical as the offsets, will certainly be neglected, and developers -- or their successors -- will ultimately do whatever they see fit with their front yards after the towers are built.)

Water-side "festival marketplaces," the likely products of Business Improvement Districts (whose mission, we should note, is Business Improvement, not District Improvement), benefit primarily the real estate values of the developers and their commercial tenants, and ignore the very real and simple desire of people to come to the water's edge. Chapter 91 laws exist to protect access to the water, because people want and need such access, which has heretofore been impeded; people don't have to be "drawn" or "attracted" to the water by "destinations" and "attractions." Chapter 91 exists in recognition of this desire and this need, to assure that access is protected and enhanced; "accommodation," not "attraction," should be the MHP focus.

Provision of generous expanses of simple, flexible, "democratic" open space should be the responsibility -- the baseline responsibility, not an "offset"-- of every developer building on state tidelands. We must trust that, given the opportunity to enjoy their newly cleaned and accessible waterfront, people will be capable of entertaining themselves without corporate circuses. And if we want to see real civic activities on the waterfront, we must build a real community; vested, permanent residents will develop their own civic life.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

January 26, 2000

Owner's Presentations: Massport Commonwealth Flats Development Area Update, Barking Crab/Neptune Enterprises

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in the BRA Board Room by Committee Chair, Rod Macdonald.

Rod opened the meeting by asking the working groups to report in the next couple of weeks. He also noted that the MHP draft soon would be ready for review.

Owner's Presentations:

1. **Massport Commonwealth Flats Development Area Update:** Jim Doolin presented for Massport. Massport has submitted an EIR for the Commonwealth Flats Development Area (CFDA). The comment period runs until February 11, 2000. He indicated that Massport is not seeking any permits through the EIR submission, but that the EIR provides an envelope for future development.

The CFDA contains approximately 70 acres of nonessential port properties. Massport's main purpose is to create a revenue stream from the CFDA which will support port-related development. Other purposes include constructing new infrastructure, creating a better environment and attracting new development for the City. Massport also is in the process of developing sustainable guidelines that will be used to guide future Massport projects and developers.

A major concern has been traffic on D Street. Massport plans to split a portion of D Street into a one-way pair in order to calm traffic on D Street and at the D and Congress Street interchange.

There are plans for 600 to 800 units of rental housing on Parcels G and J. Due to the heavy truck traffic, Parcel K2 has been designated as a transitional parcel creating a buffer zone between the Massport Haul Road and other developable parcels.

Richard Henderson addressed truck access issues. The State Highway system and Massport Haul Road serve as the key truck routes. Richard explained to the Committee the 8 different truck moves possible in the South Boston Waterfront and how they are accommodated by the existing and proposed roadway systems. After reviewing these scenarios, Massport reviewed various locations for housing in the CFDA. For example, Parcel D3, one of Massport's most challenging parcels for development, could be used for structured parking, a hotel, offices, but seems

inappropriate for housing. He noted that an extensive noise analysis would be conducted with regard to truck traffic.

After the EIR is finalized, Massport developers will have the option of electing Article 80 review or an Article 80-like review process.

2. **Barking Crab/Neptune Enterprises:** Doug Lemle, the owner of The Barking Crab, spoke regarding possible redevelopment of his site. The parcel is 34'x 200', approximately 2/3 of which is located over piles. A prior redevelopment proposal for the site was for a 3½-story structure with a water transit terminal/restaurant located on the first floor, additional restaurant space on the second floor and boutique office space on the third floor. Doug indicated that this proposal is too large for his site as it currently exists and would require additional landmass. For any redevelopment, he indicated that substitutions for height, open space, setback and facilities of private tenancy would be required. He is particularly interested in developing water transit uses at the site and, would like to see the Harborwalk incorporated into a new structure with a funky design at the site. Harborwalk could also be cantilevered, floating, or covered, similar to 303 Congress Street.

Steve Spinetto suggested that there needs to be a way to have flexibility with all developers regarding being treated equally big or small. Another member asked for clarification with respect to the status of the ownership of old Sleeper Street.

The meeting adjourned at 5:05 p.m. Next meeting is Wednesday, February 2, at 3:00 p.m. in the BRA Board Room (City Hall Room 900).

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

January 19, 2000

Presentation BMIP Master Plan Update, Offsets for Substitutions – Offset Menu, Inner Harbor, Fort Point Historic District

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:10 in the BRA BoardRoom by Committee Chair, Rod Macdonald.

Rod opened the meeting by reminding the Committee that a working session on the proposed Fan Pier project is scheduled for next Tuesday at 1 PM in the BRA Board Room. Next Wednesday at the MHPAC meeting, Massport will present on the recently filed DEIR for Commonwealth Flats Development Area. Today, there will be an update on the on the BMIP Master Plan from Nancy Tentindo and Jamie Fay, after which we will continue the discussion regarding offsets.

Presentation:

Boston Marine Industrial Park Master Plan Final Environmental Impact Report:

Nancy Tentindo addressed the Committee regarding the BMIP Master Plan Final EIR. The document was submitted to MEPA on December 22, 1999. BMIP is a 191-acre park located in South Boston that is home to some 200 businesses and 3,500 jobs housed in approximately 3.5 million square feet of space. It is owned by the City of Boston through the BRA/EDIC.

Nancy said that Final EIR was submitted to the MEPA Unit of EOEA on December 22, 1999, culminating a lengthy process that included submissions of a Draft EIR in 1996 and an interim document in 1998. Nancy said that the public hearing would take place February 3 at 3:00 pm in Room 801 at City Hall with the public comment extended until February 20. She said that the BRA was also seeking a Master Chapter 91 License for the Park that if approved would allow projects consistent with an approved Master Plan to go forward without filing for individual Chapter 91 Licenses.

Nancy introduced Jamie Fay of Fort Point Associates who prepared the Master Plan to make a brief presentation on what the plan proposes. Jamie gave an overview of the planning objectives for the BMIP, which include protecting major maritime assets, providing deep draft access for container ships, promoting the development of a seafood processing district, maintaining active ship repair facilities and creating and maintaining jobs in the maritime industrial and industrial sectors. Jamie described how the proposed zoning furthers these objectives. Jamie stated that no hotels or residential uses would be allowed and only two parcels were being zoned for commercial use. These two parcels would have low height limits in keeping with the industrial nature of the rest of the

BMIP. The majority of the Park would be either Maritime Economy Reserve or Waterfront Manufacturing.

He reviewed points of public access and where Harborwalk might be accommodated, pointing out that Harborwalk is restricted in maritime industrial areas for public safety reasons which is consistent with both state and municipal land use regulation. Valerie Burns asked if it would be possible to travel safely between the access nodes. Linda said that we were not expecting large pedestrian volumes. Jamie added that given that the area is very large, we are trying to provide as much pedestrian access as possible without interfering with marine industrial activities. Vivien Li stated that safety issues are very important and noted that the c.91 regulations do not require total perimeter access in Designated Port Areas, a designation that covers most of the BMIP.

It was pointed out that the zoning for Wharf 8 would remain the same as it is today, Maritime Economy Reserve and that Plan includes a siting analysis for a permanent facility for the BankBoston Pavilion (Harborlights) which is occupying Wharf 8 on a temporary basis.

Jamie indicated that the long-term build-out of the BMIP, as contemplated in the Master Plan, would include up to an additional one million square feet in addition to the 3.5 million square feet currently in the BMIP.

Jamie reviewed the new roads proposed for the interior of the BMIP and showed how they were consistent with the larger transportation network being proposed in the city's transportation study, particularly with respect to truck routes. He said that the future build-out of commercial space for the BMIP is well below the Central Artery/Tunnel Green Book estimates.

Discussion:

The meeting continued with a discussion of possible offsets. Valerie Burns inquired as to the difference between Chapter 91 licensing and Article 80, and which of the two occurs first in time. Linda replied that the two processes can be activated at about the same time. Article 80 is analogous to the state's MEPA process. The Chapter 91 license is often the last step.

Valerie also asked for clarification about whether residential uses could be used as an offset. Linda replied that it was an interesting idea. A member asked if Chapter 91 could enhance or achieve housing for this area. Elizabeth Grob from CZM responded that residential uses would not be recognized as an offset.

Rod focused the discussion on Pier 4. Linda noted that what was proposed at Pier 4 is not what we want to see at the Cove. Linda suggested that she would like to discuss the usefulness of the open space without getting into hard numbers. There are several options, including concentrating open space at the end of Pier 4 or concentrating open space at the Cove. Valerie Burns said that she understood the idea of trying to make the

Cove attractive on all three sides, but it was hard to envision the type of buildings that would be on Pier 4. Linda indicated that another idea was to have a covered Harborwalk on the east side of Pier 4 – similar to a European model. Greg Ketchen asked if the Committee could propose an archway, but a larger question was what is the real advantage of walking all the way around? Linda said that this is something that we should think about.

Harold Sparrow suggested that part of the discussion should involve identifying those areas that our eyes are drawn to and trying to protect that “vision”. For example, trying to achieve a clear sight line from all points when you come up out of the MBTA station (i.e. sweet spots). Harold suggested that the Committee explore establishing visual sight lines and develop some guidelines for this area.

A member suggested that the ICA site could play a role in providing open space and civic benefit to the area. Another member suggested a rooftop garden for the ICA building and that this idea might also work for Pier 4. Another member indicated that there needs to be an opportunity for showcasing this area and that having a real destination here will make it more attractive for year-round use. Although the convention center will be here, it will not be a draw for citizens. Harold added that this area is not on the way anywhere, so you will need a reason to go – there needs to be a “wow” factor to draw people.

Rod asked the Committee to focus on the Barking Crab site. Rod asked the Barking Crab owners what kinds of opportunities there were for this site and what types of substitutions they might require. Doug Lemle indicated that any redevelopment of the site would require substitutions in all four categories. The site is only 34’ by 200’. The height of the existing structure is approximately 13-16’.

Linda indicated that the Committee would like to include the Barking Crab site in our substitutions. Linda added that one problem for this site is finding a way to map the Harborwalk around the Barking Crab property. Doug suggested that he would like to see or incorporate the Harborwalk with a new structure with a funky design at the site. Another possibility was to cantilever Harborwalk. Brad Swing from the City Environmental Department said that BED does not support structures that over hang the water. Linda noted that it was possible that at this site there would be no open space requirement, which would require a substitution, and that the challenge would be to include Harborwalk in some fashion.

The meeting was adjourned at 5:00 p.m. The next meeting is Wednesday, January 26, 2000 at 3:00 p.m. in the BRA BoardRoom 900, City Hall.

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

BUCHANAN & ASSOCIATES

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JAMIE B. BUCHANAN, ESQ.
DIRECT DIAL: EXT. 234

TELEPHONE: (617) 227-8410

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To: Ann Chiacchieri
From: Jamy B. Buchanan
Date: February 15, 2000
Re: Municipal Harbor Plan Advisory Committee - Addition to
Minutes of January 19, 2000

Per my voice mail of last week, this memorandum seeks to add the following information omitted from the minutes of the January 19, 2000 MHP Advisory Committee meeting:

(Third page, add to fourth paragraph from the bottom:)

Doug Lemle also indicated that for many years and still, he has intended to use the site as a location for water transit, particularly high speed water transit from and to the North Shore, in addition to other marine activity.

Thank you in advance for including these edits at an upcoming meeting of the MHP Advisory Committee.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

January 12, 2000

Offsets for Substitutions – Offset Menu, Inner Harbor, Fort Point Historic District

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in the Piemonte Room on the 5th Floor of City Hall by Committee Chair, Rod Macdonald.

Rod Macdonald opened the meeting by asking members on the maintenance and the civic event working groups to advise as to their timetables. Harold Sparrow replied that the civic event group will hold its first meeting on January 21, and that he would be able to give a realistic time schedule after that meeting. Valerie Burns indicated that she was asked to focus on both land and water (i.e. floating debris) aspects of maintenance, and that she anticipated being able to give a report in 2-3 weeks.

Announcements: The Fan Pier working session is scheduled for January 25, from 1-3:30 in the BRA Board Room. The MHP draft should be available by the end of January.

Committee members expressed interest in an update from Massport, now that the Commonwealth Flats Development Area DEIR has been filed, and regarding the BMIP. Rod indicated that both Massport and the BMIP would be invited back to present to the Committee. Also, Nancy Tentindo advised the public hearing for the BMIP master plan has been scheduled for Thursday February 20, 2000.

Rod opened the discussion by stating the he wanted to focus on offsets for substitutions to other properties in the Inner Harbor such as Pier 4 and the Barking Crab.

Ann Chiacchieri from the BRA put together a summary of the January 5 discussion regarding offsets and baseline requirements. She asked the Committee to look over the summary and to let her know if anyone had anything to add to the list or any corrections.

A member suggested that civic use should be used in a different context or added to cultural uses. Stephanie Pollak noted that what we consider as a baseline in Boston may be different in other cities that have waterfront areas. A member suggested that street maintenance is a baseline. Another member added that offsets have to be related to Chapter 91 and its policies.

Regarding civic uses, a member remarked that at the last meeting, it was suggested that police and fire service is generally the responsibility of the City and may not be appropriate as an offset. Schools, libraries and cultural uses are grayer areas. Vivien Li suggested other, more water-related opportunities may occur. For example, if a developer proposes a water treatment plant in this area, is this a Chapter 91 related offset?

Another member asked how we address the timing issue. For example, how do we ensure that events planning, water transit and other services are actually provided? A member suggested that the structure and operation of the Rowes Wharf and World Trade Center water transit subsidies may be a useful model. Another member suggested that a trust type arrangement would provide flexibility.

A member expressed concern over "soft" offsets in that they must be carefully crafted and monitored. For these reasons, "hard" offsets – those based on the four areas of substitutions – may be preferable.

A member remarked that if we permit more open space as an offset, that in order to count as "offset", the additional space could not be sidewalks or roads. Rod reminded the Committee we needed to decide what percentage of open space can be used for sidewalks and roads.

A member suggested that we look at other models in Boston for those instances when maintenance may be used at the level of an offset. Post Office Square and Copley Plaza were suggested as examples. Harold suggested that the Committee seemed to be debating a concept that has not been designed at this stage. We have not yet established the main attractions that will attract people to this area. Harold asked the Committee to give the civic events working group some time to explore these opportunities.

A member from the audience noted that we should be careful to avoid the concept of "paying your way in". At this stage people are comfortable with owners and developers taking care of their own property. A member commented that structural offsets will last for the life of the building, and that nonstructural offsets, such as programming, should also.

Vivien Li asked the Committee to consider a 20-foot Harborwalk standard for this section of the waterfront instead of the existing 12 feet. An audience member asked the committee to consider that some sites may be too small to accommodate a larger Harborwalk. Also, is there a certain level of finish that should be considered baseline beyond which would qualify as offset?

Valerie suggested that it would be useful to understand the tradeoffs and the differences between Article 80 and Chapter 91. Nancy explained that the basis of Article 80 is a totally different intent than Chapter 91. Stephanie stated that we could not attempt to cover every eventuality with offsets. Many of the possible offset items we have been discussion may be more appropriately dealt with during the project review (Article 80) process.

Rod asked the Committee to consider possible substitutions and offsets for Pier 4.

A member stated that it seemed that the Committee was getting soft on the baseline standards if Chapter 91. Vivien Li pointed out that heights on Pier 4 differ significantly from the Chapter 91 standard because in some locations where the limit is 55 feet,

proposed heights are as high as 300 feet. Rod Macdonald commented that no conclusions had been reached as to appropriate heights or requested substitutions for any of the relevant areas, including Fan Pier and Pier 4.

A member suggested that we consider aggregating Harborwalk on the cove side of Pier 4 rather than advocating full perimeter access. Another member asked the Committee to think about promenades and visual access above grade.

A member pointed out that if Fan Pier cove area is going to be a premiere destination, this will affect the dynamic of Pier 4 and what should be done on that property. The Public Realm Plan assumes the cove will be an extremely active, public, water-oriented destination, and the MHP should reinforce this. The debate is whether a specific plan or proposal will accomplish this goal. Rod noted that this is a very unique site with three major components: proximity to the waters-edge, open space and visibility. Rod asked the Committee members where they thought open space should be located.

A member suggested that the open space should face the waterside on Pier 4, which has the potential of becoming a destination site. Rod agreed that directing the cove's edges (cove is primary) and activities towards the water sheet is key. Valerie responded that she does not view this as being a major piece because of the two large office buildings proposed for the cove that will set the character for what may happen on Pier 4. Stephanie remarked that the Public Realm Plan is very clear as to what should be built in the cove, and that other development should be built around that concept. Steve Spinetto noted that we have to look closely at programming and how we want the public to use this area, so in this case the height may not effect the activity.

Vivian suggested that she would like to see things proposed at a smaller scale at this site. Another member asked what were the residential percentages and other residential priorities for this area. Stephanie noted that the BRA has recommended in the Public Realm Plan that 40% of any new development be devoted to the creation of residential housing. The question was posed as to whether residential uses in excess of the Public Realm Plan goals could be an offset for substitutions. Shirley Kressel suggested that there are issues of civic importance and social importance that may not be Chapter 91-related issues. We need to focus our attention on the City's needs that also serve Chapter 91.

Rod closed the meeting by asking the Committee to continue this discussion and focus more on the Fort Point Historic District and the Barking Crab sites.

The meeting was adjourned at 5:00 p.m. The next meeting is Wednesday, January 19, 2000 at 3:00 p.m. in the BRA Board Room 900, City Hall.

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

January 5, 2000

Inner Harbor Substitutions – Offsets for Any Negative Impacts, Other Substitution Issues; Review of Public Space Guidelines

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in the BRA Board Room by Linda Haar, BRA Director of Planning and Zoning.

Linda Haar opened the meeting with announcements. The Fort Point Channel Working Group will meet tomorrow, January 6, 2000, at 1 p.m. in Room 937A. Also, a working session on the proposed Fan Pier project will be held on January 25, at 1 p.m. at City Hall. We are unsure of the room location, but a flyer will be sent to committee and audience members. Patty Foley, the new Executive Director of Save the Harbor/Save the Bay and a new committee member, was introduced to the members and audience. The City's Water Transportation Plan will be available in the near future.

Linda opened the discussion by stating that she wanted to focus on possible offsets for any negative impacts from substitution provisions.

A member asked if there will be baseline standards set for this area. It will be important to be clear what is and what is not an offset. Members suggested the following as baseline requirements: Harborwalk, restrooms, ADA compliance, maintenance standards, preservation of historic resources and ensuring that privately-owned public spaces are available to the public in perpetuity.

Regarding compliance with ADA guidelines, Steve Spinetto suggested another way to address these kinds of needs with water-related public benefits was through "universal design" standards. Universal design means making places accessible to everyone. Linda noted that at the same time we are trying to make design universally accessible, we also are trying to make it esthetically pleasing. She added that we could setup guidelines that emphasized both of these qualities.

A member asked if there is some way to encourage owners to aggregate open space to create a larger park in this district. Linda responded that one concern is that not all landowners are at the same stage with their projects. As a committee, we can try to figure out how we could make this collaboration work. One suggestion was to include general language in the plan authorizing the concept, leaving the details to be decided. There was another suggestion for the City to provide the funding for open space up front. Developers would be required to make offset payments as they proceed.

Greg Ketchen asked if offsets have to be on site or within chapter 91 jurisdiction. Elizabeth Grob from CZM replied that there is some flexibility for offsets opportunities, but they have to be very specific. Linda advised that we have to be careful not to create a substitution that obligates someone to do something on property they do not own.

A member asked how we would create and enforce maintenance commitments. Linda replied that this is part of the reason to include maintenance commitments in the baseline. The BRA would like to see a management plan in place with maintenance commitments for public areas even if they are privately-owned.

Valerie Burns raised the issue of how we attract people to the waterfront. Harold Sparrow suggested a civic commitment to host a "good will" event as a way to bridge the redevelopment period and bring people to the area. Jim Doolin suggested that we explore further non-capital offsets such as programming. Terry Savage suggested the creation of a management entity to handle these events. There is also a need to have an ongoing funding for this type of entity.

Shirley Kressel suggested that we need residents first in order to make the place work like a community. Linda agreed that it is important not to "over-program" an area, but a careful selection of events can bring a greater awareness to the waterfront. Also, the waterfront is different because it belongs to more than the community that lives there.

Valerie said that she would like to see high maintenance standards as the baseline. Also, we need to find a way to ensure that privately-owned public space would be available for public use in perpetuity. One option is to create the obligation through the permitting process. Other options include deed and conservation restrictions. Linda asked Greg Bialecki from the audience if he would explain the differences to the Committee. Greg explained that both types of restrictions could be used for this purpose. The primary difference between the two is who would have the right to enforce the restriction. Conservation restrictions are enforced by the entity that holds the restriction. Deed restrictions can be enforced by the general public.

Vivien Li noted that there are no public facilities proposed in this area. She suggested that we consider making provisions for public facilities such as police and fire stations and public libraries. A member suggested that there is a difference between a fire station and a library. Linda responded that public safety uses such as police and fire stations are the responsibility of the City, but other public uses facilities could be considered as an offset because they are beyond the basic FPA requirements. Other examples offered included cultural uses, such as the ICA, and free public spaces, such as a winter garden.

A member asked about public use qualifying for offsets if they will be located in areas already required to be FPAs. Another member noted that FPA usually means retail uses. Linda suggested considering free public uses and public uses above the ground floor as offsets. For example, the East Office Tower will have a winter garden. International Place also has a public space that operates well. A member pointed out that it is important to remember that a winter garden is not a food court.

Linda asked for a few volunteers to flesh out some of these ideas for maintenance standards and civic event opportunities. Valerie Burns will head the group on maintenance standards. Harold Sparrow will head the group on civic events, with help from Vivien Li and Patty Foley. Linda asked the groups to report back to the Committee.

Toni Pollak noted the lack of internal public meeting spaces. It will be important for the community to have adequate facilities available. In other neighborhoods, community centers and libraries currently serve this function. A member added that the ICA could be used as a public meeting space.

The discussion continued with the focus on how to create a place to which kids and families will be attracted. A member noted that we must not only create this space, but also activate the space, for both residents and visitors. Other suggestions for offsets were offered: childcare centers, an interpretive element similar to the North End Historic Pier Network, preserving marine-related structures, reducing on-site parking and water transit subsidies. A member inquired if land transit subsidies could be an offset. Elizabeth Grob advised that a childcare center would not be considered an offset for Chapter 91 purposes. Vivien also noted that the South Boston community is opposed to reductions in parking. Linda suggested that we would try to put together a menu of offset examples.

Terry asked when do we reach the point that the offsets are so onerous that it triggers some sort of litigation. Linda stated that this process and project reviews engage all the parties. Elizabeth noted that offset schedules might not be activated for years, which is another aspect to consider.

A member suggested that there needs to be a strong commitment to non-waterfront neighborhoods and to creating access from the inner city, such as support of the South Bay Harbortrail.

A member of the audience asked how these amenities could be used as offsets for height. Elizabeth Grob advised that height for height offsets are possible, but it is also possible to look at broader, more qualitative offsets. A member commented that we are trying to associate the nature of the offsets to the impacts of the substitution provisions. Another member suggested that we may get better results in terms of waterfront access by going outside the Chapter 91 envelope. Vivien Li remarked that height is not the issue - we want to be able to feel the connection to the water.

Linda closed the meeting by asking the working groups to report back to the Committee as soon as possible and to please call if the BRA can assist them in some way.

The meeting was adjourned at 5:05 p.m. The next meeting is Wednesday, January 12, 2000 at 3:00 p.m. in the Piemonte Room on the 5th Floor of City Hall.

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

December 15, 1999

Substitutions – Inner Harbor Shadow Study (continued)

South Boston Transportation Update

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in the BRA Board Room by Committee Chair, Rod Macdonald.

Rod Macdonald opened the meeting by stating that meeting summaries are available for November 3 and December 1, and that we are now up to date. Today we will begin the meeting with an update by Linda Haar on the schedule for issuing a preliminary Municipal Harbor Plan; next, Kairos and his team will continue the shadow studies; then, Kairos will give a brief update on waterfront transportation and development impacts.

Linda described the process for submitting a municipal harbor plan to the State. She advised that a preliminary draft would be available for Committee review in January. The goal is to submit the final plan to the state in February. The regulatory process does not provide for a "draft" plan and a "final" plan. By providing a preliminary document to the Committee prior to submission to the State, members will have time to review the draft prior to submission. This will help the BRA by providing us with feedback and enable us to make adjustments to the plan we submit to the state. Regarding the Fan Pier project, which is currently in the project review process at the City and State levels, Linda suggested joining some of the project review and MHP discussions and asked members if they would be interested in a working session on the Fan Pier. Members agreed this would be a good idea and Linda offered to schedule one in January.

Inner Harbor Shadow Study: Kairos Shen and his team showed several shadow studies to the Committee. The first study showed the following:

- **Chapter 91 conditions** - full Chapter 91 build out for the area;
- **Fan Pier** - shown as proposed together with existing conditions;
- **Pier 4** – shown as proposed together with existing conditions; and
- **Fan Pier and Pier 4** – both projects shown as proposed together with existing conditions.

All of the above scenarios were shown at hourly intervals from 9 a.m. through 3 p.m., March 21, June 21, September 21, October 23 and December 21.

Birdseye View:

Fan Pier and Pier 4 projects, as proposed, together with existing conditions, were shown at hourly intervals from 9 a.m. through 3 p.m. on, June 21, September 21 and October 23.

Net New Shadow:

Net new shadow in this context is the additional shadow cast by proposed projects beyond the shadow cast by the Chapter 91 build out. For the Fan Pier and Pier 4 projects as proposed together with existing conditions, Kairos showed the following studies:

- Net new shadow, shown first for an entire day; then, less any shadows with a duration of one hour or less; then, less any shadows with a duration of two hours or less, for each of March 21, June 21, September 21 and October 23.
- Net new shadow at hourly intervals from 9 a.m. through 3 p.m., for each of March 21, June 21, September 21, October 23 and December 21.

Sunlight Focus:

This study focuses on the areas that are in sunlight at various times of day rather than the areas that are in shadow. The study showed Fan Pier and Fan Cove on June 21 at hourly intervals from 9 a.m. through 3 p.m.

Eye Level Views:

The view from Courthouse Park towards Fan Pier and Pier 4 and the view from the proposed skating rink toward Fan Pier Cove were both shown on September 21 at hourly intervals from 9 a.m. through 3 p.m.

Post Office Square Comparison:

Because Post Office Square Park is a space with which people are very familiar, the BRA did a comparison study. The BRA compared shadows cast on Post Office Square for June 21 with the same date for the Inner Harbor (including the proposed Fan Pier and Pier 4 projects and the existing conditions).

Kairos concluded the presentation, then solicited comments and suggestions for additional studies. A member asked if street corners and streets could be tested for shadow impacts. Another member asked if there could be a comparison to Rowes Wharf. Another member asked if the East Office Tower building could be included for the Committee's reference, because it has an impact in this area.

Rod asked if the McCourt property could be integrated into the shadow study by showing a number of structures at the 150-ft. level. Another member would like the day extended to 8 p.m., and to add a day in May. Kairos continued to take requests for additional studies from members.

A member suggested that we identify sensitive areas as areas of focus. Members suggested the following focus areas: ICA site, Courthouse Park, tidal basin, skating rink, Fan Pier Cove, corners and intersections, MBTA stops and water transit stops. Rod suggested that we look at T station locations and where people will convene. Linda noted that we also need to understand what is happening in the interior. For example, what are the opportunities when the weather is bad (i.e. retail, shopping)?; how do we attract people to this space? We have to consider the winter and bad weather months if we want people to come to the waterfront and to use water transit. Linda stated that this is very

important activation, and that it must be made clear that these spaces are truly public. Rod agreed with Linda, and indicated the need to have a larger discussion on these issues at a later meeting.

South Boston Transportation Update: Kairos advised that the South Boston Transportation Study was expected to be released in January. At the last MHPAC meeting, questions were raised regarding the construction of the Courthouse MBTA station, the type of station that would be constructed and the construction schedule. Kairos indicated that it was his understanding that construction of the first phase was on schedule. Although there was an issue regarding the type of station that would eventually be constructed (purely functional v. more elaborate), the first phase of construction can accommodate either design.

Vivien Li asked if the Committee could invite the MBTA to a MHAPC meeting to provide an update on all T projects in this area. The discussion turned to issues related to the various agreements between the MBTA, private land owners and the City. Rod cautioned the Committee against getting away from what we are trying to accomplish in this area regarding Chapter 91.

Kairos indicated that the transportation study reviewed existing transportation connections and recommended some changes, including improved access to the BMIP and a new connection to the bypass road. The report includes a detailed section on truck routes, including truck access along New Northern Avenue, which was identified as a key connection. Astrid Glynn asked if Kairos could reference which projects in the area were funded.

With regard to New Northern Avenue, a member asked who was responsible for pedestrian enhancements. Kairos responded that existing contracts provided for a minimum level of pedestrian enhancements. The street and block plan in front of the Committee showed the ideas from the Public Realm Plan, which we had indicated in the Public Realm Plan had yet to be funded. The transportation study assumes many of the recommendations of the Public Realm Plan

Astrid commented that at this level of detail we are turning into a design review Committee instead of a MHPAC. She stressed the need for another forum for this discussion and the transportation discussion. Linda agreed that when a project is at the design review stage we should deal with streetscape design, etc.

The meeting was adjourned at 5:05 p.m. The next meeting is Wednesday, January 5, 2000 at 3:00 p.m. in Room 900, the BRA Board Room.

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

December 1, 1999

Presentations: The McCourt Company and Boston Marine Industrial Park Master Plan Update

BRA's Inner Harbor Shadow Study

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:05 in the BRA Board Room by Committee Chair, Rod Macdonald.

Presentations:

- 1. The McCourt Company:** Representatives from the McCourt Company envision their project as the next major piece of development for Boston's waterfront area, in conjunction with the World Trade Center. They have partnered with the MBTA, committing \$25 million of a total project cost of \$50 million to develop a T station on McCourt property. The T station will span a full block below grade and include constantly changing fiber optic screens. The structure of the station above grade will consist of three head houses that will enhance the surface. The head houses would be treated like sculptural elements, which also could be used as projection screens. The McCourt Company developed two models that demonstrated the birds eye view and the eye level view of their project below grade, which was available for viewing at the meeting. Approximately 2.6 acres of land owned by the McCourt Company is within c. 91 jurisdiction. The McCourt Company advised that it is willing to live with the existing Chapter 91 language, but if changes are proposed, they also want to benefit from them. The McCourt representative expressed concern that projects proposed for Fan Pier and Pier 4 would create a wall between their property and the waterfront. Frank McCourt indicated that if buildings in excess of the Chapter 91 guidelines were built on Fan Pier and Pier 4, the McCourt Company would build higher buildings on their property. Other than the proposed MBTA station, no particular developments were proposed by the McCourt Company.
- 2. Boston Marine Industrial Park Master Plan Update:** The BMIP consists of 3.5 million square feet of industrial space, with a possible expansion of 800,00 square feet. The BRA recently submitted an application for a Master Chapter 91 License for the park. A Master Plan Update will be filed by the end of this year. The Master Chapter 91 License will establish guidelines for uses and procedures for the approval of projects within the BMIP. With regard to the relocation of Harbor Lights/BankBoston Pavilion, the BRA is in Phase II – the inventory stage. The BRA has identified 22 potential sites for Harbor Light relocation.

Next on the agenda was the BRA's Inner Harbor Shadow Study. Because of lack of time, Linda Haar indicated that this would be more of an introduction so members can begin thinking about developing shadow standards. We will go into greater detail at the next meeting.

Inner Harbor Shadow Study: Kairos Shen of the BRA described the methodology of the Inner Harbor shadow study. Chapter 91 conditions were compared with other alternatives for the Fan Pier and Pier 4. Four months of the year were chosen using six-hour daytime intervals. The months used were June 21, March/September 21, October 23 and December 21 and the six-hour daytime intervals used were from 9 a.m. through 3 p.m. Kairos mentioned that October 23rd was a critical day chosen because temperatures are more critical to use and activity at this time of year and shadows could affect temperature. Kairos explained the concept of **net new shadow**: in the Chapter 91 context, we are using this term to mean shadows caused by new development over and above those shadows caused by Chapter 91 conditions. All the scenarios that he showed up until this point were Chapter 91 conditions. For all new shadows beyond Chapter 91, he welcomed suggestions as to what members would like to see and he would try to test them.

A member asked if the model could give a sense between height and shadow and if another color could be added to represent what was subtracted? Linda responded that there are a number of variations that could be looked at and will be explored. We also have many other elements that need to be included to get a realistic analysis for this area. We now can get into the detail of shadows during the next meeting.

The meeting was adjourned at 5:05 p.m. The next meeting is Wednesday, December 15, 1999 at 3:00 p.m. in Room 900, the BRA Board Room.

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

November 17, 1999

Standards for Open Space Substitutions

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:10 in the BRA boardroom by Committee Chair, Rod Macdonald.

Rod Macdonald opened the meeting by stressing to the committee and audience the need to start on time. He also indicated that meeting summaries were available for the October 27 and the November 10 meetings, and that we were almost caught up.

Linda Haar stated that next week's meeting (November 23) had been intended to be a short session in order to hand out a draft of the municipal harbor plan. Since we were all still working on the plan, she asked for a show of hands if the committee would like to have an informal meeting anyway. The November 23 meeting was cancelled. The next meeting is December 1, 1999. Linda said that the BRA's shadow modeling was not complete, but that it should be available soon.

The discussion continued where we left off from last week regarding standards for open space substitutions.

It is important to bear in mind that although we often refer to "open space" standards, not all open space is "green space" and that perhaps "public space" would be a more accurate term. For example, chapter 91 permits roads and surface parking to be included as open space. The City's policy is to permit new streets to be included in the open space percentage, but not surface parking lots. The City does not plan to adopt the c.91 standard in this respect. It is also important to realize that the public ways that will be built are access streets, not roads built to federal highway standards. Streets are one way to make an area feel public. In addition, on street or meter parking can also help to normalize a street and create better public access. Also, a review of other Boston neighborhoods showed that approximately 40% of the ground plane in City neighborhoods is occupied by streets. The percentage is 50% for the City as a whole.

The discussion continued regarding the amount of open space provided for in the Fan Pier proposal – slightly more than 50%. This amount does not include boardwalks, floats or floating walkways, the parcel to be donated for a civic use, or the parcel to be used to square off Old Northern Avenue. Of this 50%, approximately one-third is vehicular area. Valerie Burns noted that other waterfront neighborhoods have large open space parks and asked if there was going to be a major park created for the South Boston Waterfront area, and, if so, would such a park be located on Fan Pier? Examples cited were Piers Park in East Boston and Christopher Columbus Park and Long Wharf Parks in the North End/Downtown. Linda responded that the area in front of the Children's Museum

properties is already designated as park for this area. Although the pier in the center of the Fan Pier cove was larger in the Public Realm Plan, the Fan Pier proposal added a wave attenuation device to help with navigation. The other Park areas shown on the Fan Pier proposal include the tidal pool, open space in the northwest corner and the fountain/ice skating rink. The only other spaces shown in the Public Realm Plan for this area that would qualify as park-size open space are located largely outside of Chapter 91 jurisdiction. Stephanie Pollack stated that someone should propose a new space. Toni Pollak pointed out that all of the other park spaces pointed to along the waterfront are on public or quasi-public land, while Fan Pier is privately owned, as is much of this portion of the waterfront.

Steve Cecil noted that quantity does not mean quality, and that is also important to talk about programming and how public spaces are used. For example, at Waterfront Park, the only spaces that get used are from the trellis to the water and the tot lot. Another member pointed out that the space between the street and the trellis acts as a buffer. One member commented that programming sets the tone for how these parks are used. It is important to be specific with what kinds of uses are envisioned so we can discuss impacts, necessary accommodations and other issues. In the Esplanade, you can find your own space in an area that accommodates more than 40,000 people.

Linda remarked that users are as important as aesthetics and space. She added that we should not discount linear spaces – they are often heavily used. One approach can be to limit the amount of open space that can be occupied by streets. A member noted that Long Wharf Park was created for pedestrians and the public and that kind of character might be appropriate for Pier 4. Protected areas and enclosures of certain types, such as the Long Wharf shade structure can be included in open space areas.

The question was posed what will contribute to the quality of open space? Members replied that it should be on solid ground, that it should include basic amenities such as bike racks, restrooms, food and grass surfaces in addition to pedestrian hardscape. These features would help to get people down to the water and help to convey to the public that it belongs to them. Changes in grade can be useful in delineating public spaces. BRA design review does not specifically address c.91 substitutions, but the c.91 standards can be incorporated into this process.

Linda asked people to describe how they see the major differences between the Courthouse Park and Castle Island. A member noted one important difference at Castle Island is that you're able to walk a loop without retracing steps. While planning this area we have to be sensitive to current users and future users, which is why programming is very important when you look at these spaces. Design of open space to support programming (eg. electrical and communication connections) also plays a major role. A member stressed that in the public space standards we need to make sure that all Harborwalk elements are included in this process, including green buffers. Rod summed up that the park standards that we develop must be something that fits the area.

Linda cited the need not to over program, then questioned, what is the notion of programming? Members proposed the following ideas of programming: being able to take a continuous waterfront walk; the Seaport Festival; something that would fit into a tent, such as chowderfest; fishing pier; boating programs; historical elements trail; and promoting the area's historic past. A member asked a general question, how could we integrate these special events including winter events into existing programs? Then how do we translate these things into a project, cost etc., including programs that go beyond the planning stages? Rowes Wharf with its ongoing management entity was suggested as a good model.

A member commented that with the connection to the T, Harborwalk standards should promote channeling foot traffic to the outer edges of these streets when they are being developed through consistent signage, lighting and other Harborwalk elements. Visual elements play a big role. The Freedom Trail is the trail itself and all the historical elements in between. Another member added that public art could be an interesting tool, like the bronze ducks in the Public Garden, and that the café at Post Office Square Park is another good model. Another member said design should be program-friendly, taking into account the need for utilities, etc. for outdoor events. A member commented that special events are really a subset of "programming".

Linda Haar summed up by saying that in the Committee should focus on what would be a good plan for this area of the waterfront rather than on specific project proposals. She noted also that it will be important to build in ongoing management with public participation.

The meeting was adjourned at 5:00 p.m. The next meeting is scheduled for Wednesday December 1, 1999 at 3:00 p.m.

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MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

November 10, 1999

Standards for Open Space and Height Substitutions

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in Room 801 by Committee Chair, Rod Macdonald.

Rod Macdonald opened the meeting by advising the group that today we would delve into a more detailed discussion of substitutions.

One member inquired where we are on the schedule. Linda Haar said that she expected that we would have a draft "with some hole in it" available in about two weeks. There was discussion regarding some of the analyses called for in the scope and how we would complete them in a timely fashion. Linda indicated that some of the analyses, such as wind tunnel analysis, require a specific project. A member also inquired about shadow analysis. Linda responded that the BRA is working on a computer shadow analysis for the area the results of which she hoped would be available to show the Committee next week.

In light of the strong interest in height-related substitutions and analyses, the Committee agreed to start the discussion by addressing height substitutions, especially wind analyses and standards. A handout was available of the City's pedestrian wind standards that are incorporated in various articles of the Boston Zoning Code. Linda explained that Professor Frank Durgin of MIT developed the wind standards for pedestrians using MIT's wind tunnels. With respect to waterfront development, we would seek analysis of as-is conditions, c.91 conditions and project conditions.

Wind is a highly complex issue. Slight changes in a building's massing can have a dramatic effect on pedestrian -level winds. Because a proposed project can undergo so many changes in the permitting process, until the massing is relatively final, testing a proposed project in the wind tunnel, which is extremely expensive, does not make much sense. One member asked if the City's standards were in effect when the new courthouse was built. Linda replied that the new standards were in effect, but that the courthouse was not subject to the City's zoning regulations, so the City's standards were not applied to the project.

There was discussion around what exactly the Scope called for in terms of wind and shadow analyses. Linda responded that we will not be able to include wind tunnel testing for the area in the MHP because of the expense and because so few projects in the area are that far along. The methodology of wind tunnel testing requires you to put an entire area into the tunnel in order to get an accurate read. This is not possible at this stage. What we can do is adopt standards to be applied when a project goes through its impact analyses in the MEPA/Article 80 Process. There was concern expressed that the Scope required us to include wind tunnel testing in the MHP. Elizabeth Grob from CZM indicated that the Scope treated Fan Pier differently than other areas because the project is further along. Wind tunnel testing for Fan Pier can be completed for the

MHP or through the MEPA process depending upon the project's timing. A member inquired what buildings in Boston had been tested under these standards? Linda replied that we would try to provide examples from The World Trade Center project.

A committee member commented regarding the presentations that had been shown at the last meeting. It would be helpful to have more specific facts regarding actual numbers, retail space, residential units, etc. Rod commented that the Public Realm Plan is the blue print for this area, and it establishes a vision, a context for the area. Developers' presentations should be put into context – they provide another vision.

Chair Rod Macdonald, encouraged the Committee to move on to other height substitution standards on the agenda. Linda Haar advised that the City has no similar universal standards for shadow impacts. Boston Common had a "shadow bank". Shadow studies typically review shadow impacts during the winter, spring, summer and fall at 9 a.m., noon and 3 p.m. A member expressed concern regarding shadow impacts on important recreation areas such as Museum Wharf and the Children's Museum. Linda responded that the BRA is conducting a computer shadow analysis over the area and that this discussion will be easier when the analysis is complete. A member noted that the relationship between shadow, wind and time of year is very important. Another member noted that we should use a realistic baseline for comparison – not a surface parking lot. It is also important to take into account that the harbor faces north at this location. Also, buildings outside c.91 jurisdiction can cast shadows inside the jurisdictional line.

A member asked what other cities are doing to address these issues, (i.e. San Francisco). Linda replied that many cities have looked to Boston for guidance, especially with respect to wind standards.

A member asked what would happen if a project does not meet the standards. It is possible that existing wind conditions could be worse than our standards. Linda replied that new projects cannot be expected to go below existing conditions if that were the case.

Rod summed up the shadow discussion: we can look at the concept of a shadow bank, review shadow impacts seasonally and diurnally, the combination of wind and shadow impacts and the impact of the north-facing harbor for no build, c. 91 build and substitution massing.

The Committee next focussed on general height standards such as requiring height to step down to the waterfront. A member suggested that we speak of this standard as height rising as we step back from the water, and establish a height limit. They noted that we have to be specific especially when you talk about stepping down towards the water. Chapter 91 establishes rigid height numbers. The City is proposing certain substitutions for those numbers. The question was asked whether this would improve upon what we would get under c.91. One member commented that c.91 was "pretty good".

There was a question about whether the heights were measured from the harbor line or the water line. The BRA has a diagram that measures substitute height zones from the harbor line. Rod said that this was an issue we need to discuss.

A member commented that it is important to look at the whole picture, such as view corridors and other urban design issues. One parameter does not provide a complete picture. A series of stepped-back masses in wedding cake fashion is not the goal.

There was a general discussion about the work of the committee in developing these numerical standards – that a certain specificity is required by the state's MHP regulations. There was a comment that the first project will determine what the second project will be.

There was a request for more specificity from developers. Linda said she would ask for fact sheets from developers, but reminded the Committee that developers were at different stages. There also was a request for a shadow analysis for Fan Pier, which the BRA is working on, and more visual aids.

Concern was expressed regarding the Karp proposal – that there was a sense that if we are going to “undo” the regulations, we should “go for it”. Rod responded that we should not focus on the presentations but on what is good design and what will make better and more attractive public areas and promote activities.

The Committee next began to discuss open space, focussing on the difference between the c.91 definition and the City's definition. Chapter 91 allows you to count roadways and surface parking, while the City's definition includes roadways and sidewalks. There was discussion about open space v. green space, and how much open space should be used for roads. There was discussion about establishing standards for open space that amplify the c.91 requirements.

A member asked if we could expand the meetings to 3 hours because of all the material that needed to be covered. The Committee agreed to begin the meetings promptly at 3, instead of 3:15 for the time being, and revisit the issue of expanding the meetings in a few weeks.

There was an announcement about the Build Boston exhibition that would take place on Tuesday, November 16, 1999 from noon to 7 p.m. at the World Trade Center.

The meeting was adjourned at 5:00 p.m. The next meeting is scheduled for November 17, 1999 at 3:00 p.m. sharp.

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (ann.chiacchieri.bra@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

Meeting Summary

November 3, 1999

Owners' Presentations: Gillette, Boston Wharf and the Boston Harbor Inner Harbor Passenger Water Transportation Plan

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 in the Room 801 by Committee Chair, Rod Macdonald.

Rod Macdonald announced that, as discussed at the last meeting, he had prepared and circulated a draft of a letter from the Committee regarding the proposed legislation to remove South Station from c.91 jurisdiction. After receiving comments from several Committee members, the letter was revised and mailed. Copies of the letter were available for distribution to Committee members. He also stated that in the course of circulating the letter and receiving comments, it became clear that the Committee needs to proceed with matters on a deliberative basis. In the future, Rod noted that he wanted to avoid attempting to do anything on an expedited basis.

Rod advised that the address list need to be updated and asked members to forward any corrections. He also indicated that the sign-in sheet would be attached to the meeting summaries going forward.

Rod reminded the Committee that there is a strong need to focus on the substance of the substitutions because time is getting away from us.

Owners' Presentations:

1. **Gillette:** Gillette's South Boston campus is key to Gillette's global operations based on its location, proximity to all modes of transportation and truck routes, and proximity to the waters of the Fort Point Channel. The site provides 3,500 jobs with an annual payroll of \$150 million, including 1,000 jobs for South Boston residents. Over the past 10 years, Gillette has invested over \$1 billion in its South Boston operations. Gillette would like to see the City promote a technology-zoning district for the area surrounding the Gillette properties consisting of approximately 75 acres. High-tech already occupies acres of land in this area. Estimates of the potential economic impact for a technology district in this area are close to \$1.3 billion. Representatives from Gillette believe that the Public Realm Plan is deficient in that it promotes residential uses in the Wormwood Street area and other areas near the Gillette properties. Gillette feels the proposed residential uses are incompatible with their industrial activities.

Rod responded that it was inaccurate to say industrial uses have been ignored in this area, and that the Public Realm Plan contains specific language supporting Gillette's expansion. In addition, the Public Realm Plan designates a majority of the land area

in the South Boston Waterfront for port and industrial uses. Tony Termine from Gillette said if there was a combined effort by EDIC and Gillette or the local industries, industrial expansion could happen. Gillette advised that they do not support major changes to the Chapter 91 regulations or with respect to regulations governing use of the watersheet.

Kairos Shen noted that in the preparation of the Public Realm Plan the BRA was very mindful of the importance of Gillette and the industrial and other jobs which it provides in the City. He did not agree that residential uses in the Boston Wharf and Wormwood Street areas would be inconsistent with Gillette's industrial operations and that although the Public Realm Plan may need to be tweaked in certain respects, he was uncomfortable with what has been said regarding the Public Realm Plan not being a valid document.

2. **Boston Wharf:** The Boston Wharf Co. has been located in the Fort Point Historic District for over 150 years. Representatives expressed their discontent with the Public Realm Plan and particularly the park area shown on the Plan which would deprive Boston Wharf of a portion of its prime developable property. The Boston Wharf representatives indicated that they agree with Gillette that residential uses are potentially incompatible with existing industrial uses and that they support Gillette's concept of a high technology district for this area.

The Boston Wharf Co. is seeking flexibility with use, height and open space requirements of Chapter 91. Representatives also are concerned about the Mitigation Trust proposed in the Request for Scope. They believe that this proposed trust represents a tax that is discriminatory in singling out development sites along the Fort Point Channel.

Rod reminded everyone that the Committee is not here to review projects. We are trying to identify substitutions for property in jurisdiction.

The owner and the BRA are collaborating regarding the configuration of open space in this area. Kairos noted that when it is all built out things will have changed considerably. Rod asked is it fair to say that the MAPAC is an extension of the Public Realm Plan which was intended as a blueprint for development in the area, not an unalterable plan which was cast in stone. Kairos responded by saying that the fundamental planning and physical design principles are in place, encouraging the diversity of uses.

3. **Boston Inner Harbor Passenger Water Transportation Plan:** Nancy Tentindo from the BRA gave an overview of the City's Water Transportation Plan. Charles Norris from TAMS who worked with the BRA on the plan was in attendance. The focus of the Water Transportation Plan is on terminal infrastructure. A review of past passenger demand revealed that water transportation use in Boston has doubled. Additional demand is anticipated in South Boston and East Boston, while Charlestown maintains its ridership. Also, there is a need for better intermodel

access. Other issues identified in the plan include: a need for existing terminal sites to diversify; a growing need for terminal management; a need for ferry routes to be clearly mapped out; a need for shuttle service within the inner harbor; a need to identify sites that will be primary use, secondary use, taxi and cultural loop stops, vessel service areas and layover areas, while maximizing all landside sites with the appropriate amenities.

Valerie Burns asked if South Station could potentially become a water transit location. Charlie Norris stated that it was not feasible because bridge height prevents access at all times.

At the close of the meeting, Rod Macdonald stressed that he is determined to make some progress on the substitution material.

The meeting was adjourned at 5:10 p.m. The next meeting is scheduled for Wednesday November 10, 1999 in Room 801 of City Hall at 3:00 p.m.

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (Ann.Chiacchieri.BRA@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

October 27, 1999

Owners' Presentations: Pier 4, Forest City Enterprises, the Children's Museum, and United States Postal Service

The meeting of the City's Municipal Harbor Plan advisory Committee was called to order at approximately 3:15 in the BRA Boardroom by Committee Chair, Rod Macdonald.

Chair Rod Macdonald opened the meeting stating that the Committee has a very busy schedule. Today, there would be four presentations by major owners in the South Boston Waterfront. He stressed the need to move swiftly through the presentations in order to leave room for discussions. He also reminded the Committee that they could put their thoughts with respect to substitutions on paper.

Vivien Li asked if the Committee could discuss the Transportation Bond Bill before the presentations, because there was some urgency. Rod Macdonald agreed, but in light of busy agenda, requested that discussion be limited to a few minutes. Vivien stated that a provision inserted into the Transportation Bond Bill would exempt certain waterfront areas from Chapter 91, including South Station. She advised that the bill was expected to move quickly through the legislature and she expressed her concern that using legislation to exempt properties sets a bad precedent and undermines the work of this Committee. Members inquired about the reasoning behind the exemption, why the exemption was so site specific and what can the Committee do about it? The Committee decided to write a letter to the Legislature and the Mayor advising them of what the Committee was doing and why. Rod agreed to draft the letter and circulate it for members to review and comment upon.

Owners' Presentations:

1. **Pier 4:** The proposal consists of four buildings totaling 1.5-million square feet of development space with a combination of hotel, residential, office and retail uses. Underground parking for 1,000 cars also was proposed. An issue was raised as to how Pier 4 will address the notion of a public place that feels and looks private. The developer responded that they are sensitive to this issue, and are looking for ways to address it. Other concerns were raised regarding the height and setbacks. Heights of the proposed buildings ranged from 106 feet to 300 feet and setbacks from the water's edge in places were less than 25 feet.
2. **Forest City Enterprises/Fort Point Channel Crossing Development Project:** The proposed development consists of approximately 150,000 square feet of retail and water dependant uses in 30-foot high buildings constructed on piers. The proposed project would maintain public pedestrian access across Fort Point Channel. The developer is seeking to activate the water

sheet and is exploring ways to integrate this project into the water transportation plan. A connection between the proposed development and the Moakley Bridge was described and would be equipped with elevators to take people to the lower level and closer to the water's edge. One member commented that it is important not to feel as though you are walking through someone's backyard. The developer indicated that all edges of the project would be publicly accessible and it would meet all coastguard regulations. The developer described the site as consisting of the pile field for the existing Old Northern Avenue Bridge. The developer also indicated that the project would require a substitution for the setback provision of Chapter 91.

3. **The Children's Museum:** The Children's Museum intends to expand its mission to connect children to the Channel. They are coordinating their plans with the MBTA, who is designing the new park adjacent to Museum Wharf. The plans for Children's Wharf include rebuilding the Harborwalk, creating new interactive and passive green space, and developing waterside amenities. The Museum's concept is to rebuild the approximately 600 foot length of Children's Wharf in three phases: Phase 1 – Harborwalk; Phase 2 – Interactive park in front of museum buildings; and Phase 3 – activating the watersheet by using it in some manner for exhibition space.
4. **United States Postal Annex:** The Post Office would like to move from this site, but any move is contingent upon the ability to find a new site with 1.3-million square feet of space. They are exploring a Massport-owned site near the Reserved Channel, which also has good transportation connections. The developer advised that because South Station may need to add four tracks to accommodate the high speed rail service, any redevelopment of the site would have to be built over the tracks.

An announcement was made for the up-coming Boston Water Transportation forum set for November 9, 1999 at the World Trade Center Boston.

Meeting was adjourned at 5:00 p.m.

Next meeting is scheduled for November 3, 1999.

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (ann.chiacchieri.bra@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

MEETING SUMMARY

October 13, 1999

Urban Design Presentation – Fort Point Downtown

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 P.M. in the BRA Boardroom by Committee Chair, Rod Macdonald.

Kairos Shen of the BRA staff presented a summary of the urban design issues related to the Fort Point Downtown Waterfront, including issues with respect to the relationship between landside, water's edge and water sheet activation. In particular, Kairos described a number of alternatives for possible development, street layout and rail track layouts which could result from the relocation of the current postal annex building and the reopening and/or relocation of Dorchester Avenue as a public way.

It was brought to the attention of the Committee and audience that due to the fact that many of the issues with respect to the Fort Point Channel are highly technical in nature a small working group would be formed to address these issues. The Fort Point Channel Working Group will look at opportunities for activation of the water's edge and watersheet for public use and address issues related to public activities. The chair of the group will be Beth Nicholson Chairperson of Save the Harbor/Save the Bay. The discussion group will address issues such as the impacts of activities at the water's edge, physical constraints, navigational issues and funding and maintenance options. Individuals who can speak to these issues, such as representatives from the MBTA, Massport and the MWRA, as well as Toni Pollak, Dave Porter and Jamie Fay and others will be included. The kick-off will be Thursday, October 21 at 1 p.m.

Linda Haar of the BRA presented the Public Realm Plan as it pertains to the Inner Harbor, including issues relevant to the Municipal Harbor Plan, such as general height and setback requirements. General context can be used to focus on possible substitutions for height, setback (water dependent use zone), open space/building coverage and FPA/FPT (to allow residential lobbies on the ground floor). For example, the context of the Fort Point Channel is different from Fan Pier and may require a different setback. Substitutions are the reason we need a Municipal Harbor Plan. The requests for substitutions are to address the technical situations, not to do away with requirements for public uses.

There was a discussion regarding open space at the waterfront and the definition of open space. Unlike c.91, the City's zoning definition does not include surface parking as open space, but new sidewalks and roads are included. The Fan Pier proposal does not seek a substitution for open space. It was noted that the term "open space" does not necessarily

refer to green space. A member proposed that there be a limit on the amount of open space that can be used for streets and sidewalks, such as 10% or 25%.

It is important to establish a clear definition of open space and an understanding of the different types of open space. For example, open space can be decorative or interactive. It is also important to develop balance between open space and the development of streets and parking. There are qualitative differences between types of streets and sidewalks. Different paving surfaces, such as granite, create a different "feel" and are more pedestrian-friendly. We have to look at how streets are used, either for vehicles and/or pedestrians, and at what role the management of open spaces can play.

Another important open space issue is the quality of open space. The state's regulations are basic numerical requirements and do not address issues of quality. The Municipal Harbor Plan can provide guidance to DEP on the issue of quality of open space.

Meeting adjourned at 5 p.m.

Next meeting scheduled for October 27, 1999.

Note: If anyone on the committee has any edits or comments with respect to this meeting summary, please submit them to Ann Chiacchieri in writing via fax (367-6087) or email (ann.chiacchieri.bra@ci.boston.ma.us) within seven (7) days of receipt. A copy of your comments will be placed with the records of the meeting.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

MEETING SUMMARY

October 6, 1999

**Agenda: Chapter 91 Objectives
Fort Point Historic District and Fort Point Channel**

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:15 P.M. in the BRA Boardroom by Committee Chair, Rod Macdonald.

Rod opened the meeting by advising that members should let their opinions be known during the discussions, including those matters with which they may disagree. He noted that we would be driving the process and that although the Committee's schedule was ambitious, we needed to keep moving forward. To help maintain focus, we will provide a more detailed agenda at the meetings.

Rod began the discussion by asking people to tell us what the qualitative objectives of Chapter 91 are. Committee and audience members mentioned the following c.91 objectives: providing the public with full use and access to land at the water's edge and the water sheet; providing the balanced development that will create vitality at the edge; interfacing development with access and integrating access by public transit; creating a pedestrian-friendly environment integrated with water transportation; the preservation of aquatic life; balancing restrictions with economic viability; making the waterfront inviting to children and families; creating opportunities for new business development; providing for smaller water-dependent uses, such as Hook Lobster and the Barking Crab; promoting water transportation; encouraging diversity of scale of development heights and types of uses; make public space prominent and accessible; making the waterfront easier to get to; and making it easier to get from place to place along the water's edge. Access is also visual as well as physical.

People also mentioned that buildings and waterfront structures should relate and have an appropriate scale that's more suitable for visitors to enjoy and enhances an area when being developed; that there is a need for the waterfront to be more inviting and diversified for everyone to enjoy; that there is a certain difficulty in creating a true public space, and that open space and public space can subtly become private; and that access is visual as well as physical.

It was noted that some of the things desirable for the waterfront are not possible under c.91, but it is possible to vary from the regulations as long as the overall objectives of Chapter 91 are achieved. The plan cannot achieve every objective, but it is possible to craft a plan that includes flexibility for determinations to be made at a more micro-level in later processes, such as the City's Article 80 development review process. Concerns were expressed about providing an outside envelope because developers likely will seek to maximize their investment within the envelope provided. It was remarked that

although this is not an ideal situation, this is the mechanism provided by the Waterways Regulations. The regulations also provide the opportunity to create qualitative guidelines, in addition to quantitative ones, which can help with this issue.

The discussion then focussed on issues related to public access and certain limits that may need to apply in certain situations. For example, it may be necessary to interrupt continuous waterfront access to provide for marine emergencies and other marine functions and for security and safety reasons, especially in industrial port areas. If linear access must be interrupted, it is important to be creative and provide pedestrians with an alternate route. It is also possible to manage access to industrial/ walking port areas by allowing linear access during some periods and providing viewing areas during other periods. Continuous pedestrian access should be the rule, with a corollary of "best continuous access" if necessary for safety reasons. These exceptions should be clear and site specific. For example, marinas should be distinguished from Fish Pier-type uses because they raise a different set of issues. Marinas can and should be designed not to restrict Harborwalk.

Questions were raised regarding maintenance of Harborwalk and other public amenities. Under c.91, the licensee is required to maintain the areas that front its property, but maintenance is not a self-defining concept. Chapter 91 requires an annual inspection and DEP has the power to issue notices to comply and levy fines. Some felt that enforcement through c.91 process may be sporadic, and there was interest in incorporating and funding a monitoring function in the MHP. It was remarked that it is necessary to keep the economies of proposals in mind – there are no unlimited sources of funds.

There also was discussion about making sure that certain needs be met along the harbor, such as ambulance access to the waterfront, fireboat docks, ladders along the sea wall, a hurricane shelter, etc. It was noted that not every site requires every use, but that the MHP could provide guidance as to where these uses should be located.

Greg Ketchen announced that there would be a forum on water transportation on November 9, 1999 at the New England Aquarium.

Kairos Shen of the BRA staff presented a summary of the Public Realm Plan as it pertains to the Fort Point Historic District and the Fort Point Channel. Kairos also described where Harborwalk is being completed as part of the Central Artery/Tunnel Project.

The meeting was adjourned at 5:00 p.m. The next meeting is scheduled for October 27, 1999.

MUNICIPAL HARBOR PLAN ADVISORY COMMITTEE

MEETING SUMMARY

September 29, 1999

Agenda: Consultation Session – Discussion of Request for Scope and Scope for South Boston Waterfront District

The meeting of the City's Municipal Harbor Plan Advisory Committee was called to order at approximately 3:00 P.M. in the BRA Boardroom by Committee Chair, Rod Macdonald. Although this meeting serves as the formal Consultation Session required under the Municipal Harbor Plan Regulations for the Request for Scope for the South Boston Waterfront, Rod said that he anticipated that the discussion would be ongoing. He opened the meeting by asking if anyone had any questions or comments regarding the Request for Scope.

There was an extended discussion regarding the geographic area to be covered by the Municipal Harbor Plan – the "Harbor Planning Area" defined in the regulations (the "MHP Area"). Some committee members expressed an interest in expanding the MHP Area. They raised issues about the inherent difficulty in separating c. 91 properties from adjacent land and the relationship of the South Boston Waterfront to East Boston, North End, Harborlights location, the Designated Port Area and Marine Industrial Park, as well as to transportation issues. It was pointed out that the MHP Regulations do not require the MHP Area to be only those lands subject to c.91 jurisdiction and that including "non c.91 lands" does not then subject those areas to c.91 jurisdiction.

Other committee members felt that the MHP Area should not be expanded, and that the other geographic areas should be discussed in the MHP for contextual purposes only. The City of Boston is unique in comparison to other cities and towns. The MHP process is only one of many planning tools that the City has at its disposal. In recent years, the City has completed the joint Massport/BRA Port Plan and the Public Realm Plan, and will soon complete the BMIP Master Plan and the South Boston transportation study. The MHP, under DEP jurisdiction, is an implementation tool. The MHP will seek substitutions for some numerical requirements, it is not a sign-off on transportation or design. It is a massing envelope. Chapter 91 and Article 80 still apply. The MHP process will be a broad discussion that includes these other processes and areas for contextual purposes. Presentations by property owners and on some of these other plans scheduled later in the month will help to give context to the MHP Area.

The Committee agreed to revisit this issue and moved on.

Committee members raised the issue of the role of the Committee in the MHP process. The BRA indicated that the purpose of MHP Committee is to make recommendations to the state. It is not expected that the Committee will be in complete agreement on every issue.

Issues were raised regarding the public process in South Boston for the Request for Scope and who would be on the Committee in the future. The BRA is working with elected officials to establish a community process for the neighborhoods impacted by the MHP. The formal comment period for the Request for Scope is closed. However, South Boston groups were notified of the process in the beginning. This is the beginning of the consultation period and EOEa is listening to comments.

The Committee also discussed the issue of open space/lot coverage. C. 91 restricts lot coverage to 50% of a site. The remaining 50% of the site may include roadways, sidewalks and surface parking, as well as green space. The City's zoning definition of open space does not permit surface parking and existing roads to be counted as "open space", but it is important to take into account that the street and block plan in the Public Realm Plan requires property owners to provide new streets and sidewalks for the public on their property, and these therefore can be calculated in open space.

The Committee also discussed activating the Fort Point Channel and what type of structures were envisioned for the Channel itself. The Request for Scope proposed floats, docks and piers for public access, not "structures" in the sense of buildings. There was discussion regarding the implications of moving the harbor line in the Channel. Moving the harbor line does not remove the Channel from c.91 jurisdiction. The harbor line prevents any structure from being built in the Channel, including docks and piers for boats, without a legislative exemption. Floating structures are allowed in the Channel, but they must be permitted every year. Depending on an annual permit discourages long term investment.

The suggestion was made that meetings need to be memorialized by either minutes or recording. The BRA indicated that it would provide meeting summaries.

Meeting was adjourned at 5:00P.M.

Next meeting scheduled for October 6, 1999.

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
JANUARY 1950

TO THE HONORABLE CHAIRMAN OF THE BOARD OF TRUSTEES
OF THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
JANUARY 1950

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
JANUARY 1950

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
JANUARY 1950

Appendix 2:

Maintenance Standards

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Appendix 2: Maintenance Standards

Draft For Discussion

Draft For Discussion

Municipal Harbor Plan Maintenance Standards for Public Realm Land and Water's Edge

prepared by Rod Macdonald, Greg Ketchen and Valerie Burns,
sub-committee of the Municipal Harbor Plan Advisory Committee
February 9, 2000

General Recommendations for Baseline Maintenance

1. Each property owner prepares an annual maintenance and management plan which addresses the specific elements of streets, walkways, parks, landscape, surface and water's edge of their development. The maintenance plans should be in keeping with the public realm of standard Class A development such as Post Office Square and Rowes Wharf. These plans must be accompanied by executed contracts that will implement the plans. In addition a capital plan with schedule and funding sources should be prepared to insure quality of the public realm over time.
2. A Public Realm Management Committee be created to oversee the implementation and coordination of the various maintenance and management plans. The Committee should consist of representatives of the state, city and nonprofit advocacy / neighborhood groups and representatives of the property owners. The Committee, in addition to its monitoring function, can serve as an information sharing and problem solving entity that works for the coordination of maintenance and management of the Public Realm into a cohesive system. The Rowes Wharf Management Committee is predecessor of such an entity.
3. Property owners should participate in the newly formed Harbor Debris Cleanup Initiative that is working to maintain Boston Harbor and its edge in a safe, healthy and navigable condition.

Maintenance Recommendations

Maintenance of parks, harborwalk, streets, sidewalks and other public areas

Each public space will have its own unique characteristics such as landscape plantings and choices of pavement, lighting, furniture, and signage, etc. The goal of the maintenance standards is to ensure public spaces that are useable, attractive, inviting, safe and secure. The following addresses basic maintenance elements which all plans must include:

1. Inspection: On a seven day a week basis, site to be inspected twice daily; additional inspection for high traffic areas.

2. Trash, Litter and Animal Waste:

Trash receptacles should be provided in all public areas such as parks, harborwalk, and sidewalks and placed in areas of high use and so as not to impede pedestrian circulation.

Empty all trash containers daily. Trash containers in areas of high activity may be needed to be emptied two - four times a day or more. Wind blown trash is a major source of debris in the water. Attentive maintenance of trash receptacles has both land and water impacts. Additional trash receptacles should be provided during special events such as festivals and during high use periods.

Inspect all sites for strewn trash at least daily.

Street cleaning by hand or machine from April through October on a twice weekly basis, November through March on a weekly basis as weather permits.

Provide dispensers for plastic bags for dog owners to dispose of their animals' waste into appropriate receptacles. Keep plastic bag dispenser filled and waste receptacles emptied daily.

3. Landscape Areas:

Furnish all labor and materials necessary to provide complete and continuous maintenance of all landscape area in order to keep such areas in a healthy, groomed and growing condition, including the following:

Lawn care to include: watering, fertilizing; weed, disease and pest control, aeration, de-thatching, over-seeding, leaf pick-up and removal; edging of plant beds and lawn edges, and mowing. The frequency of these items will be determined by the type, extent and use of the lawn areas. For example, Post Office Square Park has 55 lawn mowings a year.

Tree and Shrub Care to include: watering, fertilizing, deep root fertilizing, disease and pest control, pruning, cabling, and replacement of trees and shrubs as necessary.

Plantings (annuals and perennials) to include: watering, fertilizing, mulching, weeding, lime applications, dead heading, dividing, transplanting and planting of bulbs and annual plants and replacement as necessary.

4. Pavement:

Paving materials in parks and harborwalk and sidewalks will vary and require specific treatments. Pavement maintenance should include daily litter pickup, sweeping, pressure washing, graffiti removal and prompt replacement of broken or ruptured surfaces.

Snow removal from all streets and walkways. Efforts should be made to use only sand and to minimize salt use to protect landscape and water quality.

Cleanout/repair of storm sewer/runoff drains as necessary.

5. Park and sidewalk furniture; public restrooms:

Daily inspection of park and sidewalk furniture with maintenance items to include graffiti removal, repair of broken or damaged elements.

Restrooms to be inspected regularly, stocked and cleaned daily, more often in high traffic areas and during events.

6. Lighting:

Harborwalk, floats, dock's and water's edge should be well lighted and consistently lighted to invite public activity after daytime hours.

Maintain all lighting fixtures in park, on streets and walkways in good working order. Based on daily inspection, replace all broken or damaged poles, luminaries, bulbs or other components daily.

7. Waterfront; watersheet:

Furnish all labor and materials necessary to provide complete and continuous maintenance of all piers, floats and walkways.

8. Other:

Additional elements requiring maintenance may include drinking fountains, bicycle racks, ornamental fountains, public art, play equipment, and directional, regulatory and interpretive signage.

Water's Edge Maintenance

The Boston Harbor Debris Cleanup Initiative is developing standards and practices to keep the water's edge free of debris and safe for users. Property owners, boat operators, regulators and advocates are working together to find shared solutions. As new developments are built, the planning, construction and maintenance of the water's edge should be informed by this group.

Maintenance of waterside conditions should include maintenance of the seawall in a safe and secure condition; maintaining depth of water to allow safe navigation at mean low water of public and private vessels with draft up to 15 feet; removal of large obstructions; maintenance of floats, docks and wave attenuation structures to allow safe vessel operation.

Note: Committee recommends creation and maintenance of drop off/pick up locations for private boats (5 minute maximum).

Appendix 3:

Civic Events Report

THE
JOURNAL OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE

VOLUME 100 PART 1 2000

Municipal Harbor Planning **Events and Festivals in the new South Boston Seaport Neighborhood**

Why is it important?

What defines a neighborhood, is not just bricks, mortar or open space, but the events that take place in the community. Neighborhoods evolve from histories and traditions, the food, fun and festivities of past and present. Without these social precursors what would happen?

This is the first time in Boston's history that we have an opportunity to build a neighborhood and make it a vital, diverse and accessible community. It is important to lay a foundation for a civic event that will bring everyone together. The geographical position of the district is one of convergence. This gateway is where the industries of Air, Land, Sea and hospitality meet. So why not the people of Boston?

Because of it's prominence we have a responsibility to the city to create a welcoming civic atmosphere and to make sure that of all of Boston's residents join us in the celebration for this new neighborhood.

What are other communities doing?

Many coastal communities have grown to understand the vitality that their location brings to their community. They utilize this connection by holding events and festivals on or around their coastlines.

- Providence, Rhode Island is a rapidly improving city and their rebirth coastline is at the center of it all. Some popular events that have been partly responsible for the city's revitalization are:
 - * FireWater, a quarterly floating exhibit of individual "fire sculptures" accompanied by music
 - * "Convergence; The International Festival of the Arts" a ten-day, waterfront festival that celebrates the city and the arts.
- Halifax, Nova Scotia celebrates their location with the International "Buskers Festival" an exciting ten-day showcase of street performers and musicians that attracts crowds of over 500,000.
- Toronto holds a three-day long Oakville Waterfront Festival.
- Mystic, CT hosts the "Sea Music Festival", a unique weekend gathering of musicians, performers and audience who celebrate the sea with song and performance.
- Quebec hosts the "Quebec Winter Carnival", one of the World's largest Winter Carnivals
- Boston's Harbor Fest

Please see "appendix A" for complete research done on events

How can we make this happen?

Pru-Pac: An Example

Started in late 80's, early 90's to serve as a conduit for the repository of development funds that were being generated from the development of the Prudential area. Public and private developers were required to pay a fee attached to building permits

The monies were deposited into a dispersible fund, which a community action group decided how to spend. Money was also deposited into an endowment for the maintenance fund for the Friends of Copley Square

Trusts: A Perpetual fund of 5-10 million would provide a beneficiary stream of 5% of the market value of the fund. This would fund the event. Example: The Friends of Copley Square set up a trust between the city and businesses with the goal being 5 million, this has proved to be an effective model over time.

Other Options:

1. The city: The City could set up trust that would be managed by the city.

2. The Boston Foundation:

The Public Foundation: Establishing a component fund within a "public" or "community" foundation, such as the Boston Foundation is an attractive option for many because this choice gives the donor the most favorable tax treatment for his or her contribution as well as access to the public foundation's professional expertise in fund administration, investment management, grantmaking and evaluation. The component fund can be referred to as a "foundation" and the donor and family members can play an active role in management and grantmaking, but the public or community foundation retains legal control of the assets.

The Boston Foundation: As an impartial third party, the Boston Foundation provides neutral management of the fund. The Boston Foundation also holds final veto power, if the fund usage does not meet the criteria established by the committee. A fee of .75% is attached to funds under five million dollars

Develop an advisory committee made up of local business institutions, residents and city and state government.

Business Improvement Areas (B.I.A.s): A Canadian success story.*

Many towns in Canada have adopted a unique way to improve their towns and include everyone in the process. This is a model with some formulas that may be applicable in our situation.

What is a "BIA"? An association of business people who have joined together to promote their mutual interests. It is established through a by-law passed by the municipal council at the request of the local business community. A BIA covers only a specific area.

How is it financed? In Canada, BIAs are financed by a special levy on municipal taxes. Every business in the designated area is automatically included in the membership and contributes to the BIA's budget. The levy is collected by the municipality but is administered by the BIA to implement its program of activities.

What sorts of activities fall under the BIA's program? Annual beautification for the area, such as landscaping, street lamps, garbage cans, bike racks and signage. (This constitutes about 25% of the annual budget). The BIA also promotes tourism and the downtown through special events.

How is the BIA managed? An executive board called the Board of Management is comprised of nine directors and a representative from Town Council. Board members must have a business in the area and all board positions are volunteer. The term is three years. This Board of Management is responsible for the function, direction, and identity of the BIA and determining the policy of the association. It determines the annual budget and monitors the activities of the committees related to policy and budget issues.

Organizational Structure: Besides the Board of Management, there is one paid staff person who is responsible for all marketing and advertising, BIA representation and for assisting it's membership.

This is just a brief overview of a theory that we may able to modify to meet our needs

* Some communities in the United States have adopted a similar system, referring to them as "B.I.D.s" (*Business Improvement Districts*)

Advantages to establishing a community event in the South Boston Seaport Neighborhood

- * A symbolic and political statement that all parties involved are committed to creating a civic event that has mutual benefits for all
 - * Creates excitement
 - * Promotes area businesses
- * Establishes something perpetual, a new tradition for a new community
 - * Dollars given are tax-deductible

Two Closing Questions:

1. If we choose to do this, how does the deal get done?
2. Has anybody participated in a similar process?

Appendix A

Seaport Events and Festivals: Fact Sheets

CANADA

Name of Event: The Oakville Waterfront Festival

Where: Toronto

Years in Existence: Started in 1992 as part of Canada's 100th Anniversary

Funding/Sponsorships: Corporate sponsorships

Who started it? Primarily volunteer driven. Lisa Dodd was the first Executive Director

Dates: June 23-25 three-day event

Crowds: 140,000 people

Ticket Prices: Admission Buttons- \$7 in advance \$10 at the gate

Summary: Features children's activities, music performances, crafts, games, an arts and crafts market and a gymnastics troupe.

Name of Event: Buskers

Where: Halifax, Nova Scotia: The Waterfront, Granville Mall and Grand Parade

Years in Existence: 13 Years

Funding/Sponsorships: Labatt Blue (a beer company) and SAS Restaurants Limited hosts entertainment at the "Labatt Entertainment Tent"

Who started it? The Atlantic Busker Festival Society

Dates: 10-Day run every August

Crowds: 500,000 people

Ticket Prices: "an appreciative contribution to the performer's hat at the end of their show"

Summary: "Busking" is the art of street performing or street theater. Common "Buskers" seen at the festival include jugglers, actors, comedians, magicians, dancers, musicians or a combination thereof. This spontaneous, crowd driven event attracts performers from international origins, and attracts crowds of over 500,00 people.

Name of Event: The Festival of the Islands

Where: Gananoque, Ontario and the Thousand Islands

Years in Existence: 1999 was the 8th year

Funding/Sponsorships:

Who started it?

Dates: August 13-22

Crowds: 30,000-40,000 people

Ticket Prices:

Summary: This festival features live entertainment every night at the festival grandstand, a midway, a "Giant" Festival Parade, outdoor performances in the town park, a scuba treasure hunt, DART Catamaran rides, breakfasts, lobsterfests, a community auction, Heritage Days, historical re-enactments and a musical fireworks display on the last night

Canada Continued

Name of Event: The Quebec Winter Carnival

Where: Quebec City, Canada

Funding/Sponsorships: Main sponsor is Kellogg's Cereal

Dates: Always late January into early February- a 15-17 day run

Ticket Prices: purchase of a button

Summary: During the coldest months of the year, while most people retreat into their homes, people in Quebec defy the bone-numbing cold to throw one of the World's largest Winter Carnivals; The Quebec Winter Carnival. The Carnival features a huge ice castle, ice sculptures, two night-time parades, three raft runs, two ice peaks to climb, an igloo village, and various dance and music performances.

Connecticut

Name of Event: The Sea Music Festival

Where: The Mystic Seaport

Years in Existence:

Funding/Sponsorships: Sponsors; Red Hook Brewery, Levine Distributing Company, and the Mystic Seaport Museum

Who started it?

Dates: June 10,11,12,13- 1999

Crowds: Varies per performance

Ticket Prices: Varies depending on day of concert and whether tickets are ordered in advance. The range is \$10-\$18 or a weekend pass is \$48 for adults and \$35 for children and members.

Summary: Over forty musicians and performers gather for the only event of this kind in North America. "Songs of the sea" is the theme of the weekend. There are concerts and workshops, a "music of the sea symposium", 2 Pub Nights, and special family events.

Name of Event: Mystic Outdoor Art Festival

Where: Historic Downtown Mystic

Years in Existence: 2000 is the 42nd Annual Festival

Funding/Sponsorships: Mohegan Sun, 102.3, Mystic Color Lab, Citizen's Bank, ChelseaGroton Bank, Cherenzia, Mystic Whaler Cruises, People's Bank, The Washington Trust Company, 107.7 and the Mashantucket Pequot Tribal Nation

Who started it?

Dates: August 12 and 13, 2000

Crowds:

Ticket Prices: Free

Summary: A juried outdoor craft show with more than 250 artist exhibiting oils, watercolors, photography, pastels, sculpture, and acrylics. Sixty crafters display their creative works in an exhibit. There are also music performances, children's art activities, food and drink.

Rhode Island

Name of Event: Convergence: The International Festival of the Arts

Where: Providence- Waterplace Park, The River Walk, Roger Williams Park

Years in Existence: 1987

Funding/Sponsorships: Sponsored by the City of Providence, The Mayor, The Providence Department of Public Parks-Cultural Affairs Department, Providence Department of Planning and Development, NBC10WJAR TV, the Providence Journal. Festival Partners include Rhode Island School of Design, the Arcade, the National Park Service and Heritage Harbor.

Who started it? Bob Rizzo of the Providence Parks Department

Dates: Started out as a one day festival, now it is ten-days and nights long

Crowds: 100,000 people

Ticket Prices:

Summary: A ten day long festival that has something for everyone; music, dance, theater, film, backstage tours of local performance houses, art lectures, street performers and children's activities. There are large sculptures throughout the city. WaterPlace Park hosts dance and music performances at the Amphitheater. The Gallery Night Art Trolley takes people on tours of the local galleries. The Thayer Street Business Association presents the Annual Providence Art Festival on Thayer Street and the 25th Annual New England Film and Video Festival also comes.

Name of Event: 8th Annual Providence Waterfront Jazz Festival

Where: Providence- Waterplace Park

Years in Existence: 8 years

Funding/Sponsorships: Open Door Music Company, Baileys' Home, and WGBH Radio. Proceeds benefit the Providence Black Repertory Company's "Youth Arts Education Program" and CapitolArts Providence "Arts in the City Programs"

Who started it? CapitolArts Providence and the Providence Black Repertory Company

Dates: One Day

Crowds: 50,000-70,000 people

Ticket Prices: \$7.00

Summary: Day long Waterfront Jazz Festival

Name of Event: WaterFire

Where: In the Basin of Water Place Park and up the Woonasquatucket and Moshassuck River.

Years in Existence: 1995

Funding/Sponsorships: Exists solely on the support of contributors and funders, the Mayor, the City of Providence, and major leadership grants from some private funders.

Who started it? Artist Barnaby Evans

Dates: Runs throughout the year depending on the weather and funding (March 31)

Crowds: 500,000

Ticket Prices: Free

Summary: WaterFire features fire sculptures floating in water that are tended to throughout the evening by volunteers. Music accompanies the displays and sculptures may be viewed from land or by taking a gondola ride through the sculptures. WaterFire began as FirstFire'95 on New Year's Eve 1994 and returned as Second Fire in June 1996 for the International Sculpture Conference in conjunction with Convergence Art Festival. It is now year round depending on funding.

Virginia

Name of Event: The Virginia Waterfront International Arts Festival

Where: The Virginia Waterfront

Years in Existence: Premiered in 1997

Funding/Sponsorships: For first year money was raised from the surrounding town's local governments. Now they rely on grants, local business sponsorships, and a growing membership base.

Who started it? Started by the Norfolk Convention and Visitor's Bureau in an effort to promote the area as a cultural center/ tourism destination

Dates: April 27- May 21, 2000

Crowds: 80,000 people

Ticket Prices: Varies for individual events: range is \$0-\$85

Summary: The festival showcases world class events from around the world. The 1998 season featured artists from the worlds of classical, jazz, and world music, classical ballet and modern dance, and music theater and the Festival's signature event "the International Military Tattoo"

Other venues that are contributing to the waterfront vitality of cities:

Florida, Ft. Lauderdale: Las Olas Boulevard- Joining the ranks of the "great streets" of America and abroad, Las Olas Boulevard boasts architecture of South Florida's Spanish heritage, horse drawn carriages, dining and entertainment al fresco, classy thrift shops, designer boutiques, art galleries, sidewalk cafes and jazz houses. The Boulevard runs almost parallel to Ft. Lauderdale's New River on its way to the Atlantic Ocean. It is a broad avenue divided by a wide landscaped meridian of flowers and towering shade trees. The Museum of Art is located at the most western point of the boulevard where there is also a gateway to the downtown area of cultural activity known as the "Art and Science District".

Florida: The Pier- In St. Petersburg, This building is situated at the end of a mile long approach. It is a five story inverted pyramid with shops, restaurants, an aquarium, live music and boat docks. On the top floor is an observation deck. The Pier hosts a myriad of events all year long including: Roving Street Theater every day, A Dixie Land Band every Thursday, Clowns and live music on weekends, and live bands on the top deck every night. Conservation Groups including The Sierra Club and the St.

Petersburg Audubon Society host lectures at the Aquarium. There is a neighborhood Block Party sponsored by the St. Petersburg Neighborhood Association.

Bath, North Carolina: Front Street Waterfront Park- A large waterfront Park offering panoramic views of the water that holds picnics, music shows and crafts festivals.

Of Additional Interest:

Canada: The Downtown Barrie Business Improvement Area

In 1973, at the request of the local business community, City Council passed a special by-law establishing the Downtown Barrie Business Improvement Area (BIA), as a specific geographic area.

Once established, all businesses assessed for business taxes within the BIA boundaries are automatically included in the membership and contribute to an operating budget. This budget is financed through a special levy on municipal business taxes, collected by the City and administered by the BIA Board of Management.

The Board of Management is a volunteer driven committee sensitive to the present economic conditions effecting BIA members and administers programs according to these conditions.

The BIA is dedicated to the enhancement of Downtown Barrie as an attractive place to live, work, shop and conduct business. This is achieved through a coordinated program of joint promotions and the improvement of municipally owned lands.

The Downtown Barrie BIA represents the business interests of over 400 retail, service and professional members. There are many on-going committees within the BIA including promotion, parking, maintenance and security and planning and development. Any member of the BIA community is invited to sit on any committee. The BIA is run on a day-to-day basis by an Administrator who can be reached through the BIA office.

The Downtown Barrie BIA's mandate is to: Attract business to Downtown Barrie by maintaining, improving and beautifying municipally owned lands and promoting Downtown Barrie as a commercial business district. This is achieved through programs which include long term planning, streetscape, facade and parking improvements, maintenance and security issues as well as promotion and special events.

Special Events

The following are some of the highlights, popular with residents and visitors.

February 2000-Winterfest and Festival of Ice Display, co-sponsored by the Downtown BIA and the City of Barrie. Three-day event includes a large variety of activities ranging from Ice Carving to Hot Air Balloon rides.

July 2000-Annual Promenade Days Street Festival in Celebration of Canada Day.

August 2000-Annual Kempenfest Canadiana Music Festival.

Appendix 4:

The Durgin Wind Study

**A QUALITATIVE ASSESSMENT OF PEDESTRIAN LEVEL
WINDS FOR THE SOUTH BOSTON WATERFRONT COMPARING
THE AFFECTS OF CHAPTER 91 AND MUNICIPAL HARBOR PLAN
REPRESENTATIVE BUILDOUTS**

BY

FRANK H. DURGIN

June 9, 2000

**SUBMITTED TO:
BOSTON REDEVELOPMENT AUTHORITY
ONE CITY HALL SQUARE FLOOR 9
BOSTON, MASSACHUSETTS, 02129
ATTENTION LINDA HAAR**

**A QUALITATIVE ASSESSMENT OF PEDESTRIAN LEVEL
WINDS FOR THE SOUTH BOSTON WATERFRONT, COMPARING
THE EFFECTS OF CHAPTER 91 AND MUNICIPAL HARBOR PLAN
REPRESENTATIVE BUILDOUTS**

BY FRANK H. DURGIN, P.E.

SUMMARY

An assessment has been made to compare the relative effects on pedestrian level winds (PLWs) of representative buildouts of the Chapter 91 and Municipal Harbor Plans. Since how each building will affect winds locally will depend on its massing, and how the winds interact with it and other nearby buildings, the emphasis is on the effects of these buildouts on the Harborwalk and two small parks adjacent to the Harborwalk. In general, the addition of these buildings will tend to reduce PLWs at more locations along the Harborwalk than it increases them. The Chapter 91 buildout provides slightly more reduction in PLWs along the Harborwalk than the Municipal Harbor Plan buildout. Comments are made on the relative effects of different types of building massings (Section 3).

The detailed results are presented in Figures 13-27 and Table 1 and are summarized in Tables 2 and 3. As presented in Figure 19, most locations on Fan Pier are in Category 4 (uncomfortable for walking) for NE winds and no build conditions. This was also true for NE winds in Reference 1, but over all (that is, combining the results for all directions), all those locations were in Category 3 (comfortable for walking). Usually, strong NE winds occur when it is raining or snowing, so that it is unlikely that people will want to be on the Harborwalk.

2.0 INTRODUCTION

This is an assessment of PLWs on the South Boston Harborwalk and two adjacent small parks in the vicinity of the proposed representative Chapter 91 and Municipal Harbor Plan buildouts. The assessment is based on:

1) Topographic and Planimetric Survey maps of the area showing the representative buildouts for the Chapter 91 and Municipal Harbor Plans (Boston Redevelopment Authority (BRA));

2) Results from a previous wind tunnel study of the proposed development for the Fan Pier – Pier Four area [Reference 1];

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
5301 SOUTH CAMPUS DRIVE
CHICAGO, ILLINOIS 60637

10/1/2011

10/1/2011

Dear Sir,
I am writing to you regarding the results of the experiment we performed in our laboratory. The results show that the reaction rate is significantly higher than expected, which may be due to the presence of impurities in the reactants. We are currently investigating this further and will report our findings to you as soon as they are available. Thank you for your interest in our work.

Sincerely,
Dr. John Doe
Professor of Chemistry
The University of Chicago

10/1/2011

Enclosed for you are the results of the experiment we performed in our laboratory. The results show that the reaction rate is significantly higher than expected, which may be due to the presence of impurities in the reactants. We are currently investigating this further and will report our findings to you as soon as they are available. Thank you for your interest in our work.

Very truly yours,
Dr. John Doe

Enclosed for you are the results of the experiment we performed in our laboratory. The results show that the reaction rate is significantly higher than expected, which may be due to the presence of impurities in the reactants. We are currently investigating this further and will report our findings to you as soon as they are available. Thank you for your interest in our work.

- 3) 20 photographs taken during a recent site visit;
- 3) Site visits to the area for this assessment and for previous studies;
- 4) An evaluation of the urban context of the proposed project site;
- 5) A review of the Boston wind climate; and
- 6) The author's 30 years of experience dealing with PLWs.

The interaction of the wind with buildings and structures is very complicated and, at times, difficult to predict, especially for urban areas that include a mixture of low-rise, mid-rise, and high-rise buildings. Thus this evaluation provides a qualitative assessment of PLWs.

2.0 LOCATION AND DESCRIPTION OF THE PROJECT AND SURROUNDING AREA

2.1 LOCATION AND DESCRIPTION OF THE BUILDOUTS (Figures 1- 3)

The site is in South Boston. One part is along the Fan Pier – Pier Four waterfront and the other along the SE side of the Fort Point Channel from Mount Washington Street to Northern Avenue and Fan Pier. The only significant buildings currently in the Fan Pier – Pier Four area are the new Federal Court House (135 feet) on Fan Pier and the Anthony's Pier Four restaurant (30 feet) on Pier Four. Figure 1 shows the no build condition and the 26 locations along the Harborwalk that will be discussed. Locations 25 and 26 are within the proposed small parks in the Municipal Harbor Plan.

The SE side of the Fort Point Channel is already built up right to the channel between Congress and Summer Streets and for the length of one building to the SW of Summer Street. There will be an open area between Congress Street and the original Northern Avenue and between Summer Street and Mount Washington Street, although it will be quite built up for the Municipal Harbor Plan. Currently the area between Mount Washington Street and Summer Street is open and under construction in connection with the depressed Central Artery project. The representative buildouts for the Chapter 91 and Municipal Harbor Plans are shown in Figures 2 and 3 respectively. The 26 locations considered and the heights of most nearby buildings are indicated. The representative buildout buildings for the Chapter 91 and Municipal

Harbor Plans are outlined in bold in the two figures. While the heights are not given, there is an almost unbroken length of six story buildings along the SE side of A street from Wormwood to Mount Washington Streets.

2.2 THE SURROUNDING AREA (Figures 1-3)

The Boston Financial District with its many 300 to 600-foot buildings is to the W and NW of both sites, but the Fort Point Channel and some of Boston Inner Harbor are between the Financial District and the sites. The Fan Pier – Pier Four area is very exposed to N, NE, and E winds coming off the harbor. Currently, this area is also quite exposed to SE, S, and SW winds because it is open upwind for these wind directions. For both the Chapter 91 and Municipal Harbor Plans the Harborwalk in this area will be sheltered for many wind directions by the proposed buildings.

The SE side of the Fort Point Channel is partially exposed to N winds, which blow diagonally across the channel. However this side of the channel is sheltered from NE, E, SE, and S winds by the new Federal Court House and other existing buildings to the SE of the site. SW winds blow somewhat diagonally across the Fort Point Channel and thus the Harborwalk along its SE site is partially exposed.

3.0 THE WIND CLIMATE

3.1 THE VARIATION OF WIND SPEED WITH HEIGHT

In general, the natural wind is unsteady (*i.e.* it is gusty) and its average speed increases with height above the ground. Figure 4 [2] depicts how the average wind speed varies with height for different types of terrain. While generally it does not happen, when one puts up any building, the possibility exists that the building will bring the higher speed winds at the top of the building down to ground level.

Figure 5 shows schematically how an isolated building typically interacts with the wind. Because the wind speed increases with height, as the wind is forced to stop at the upwind façade, the pressure recovered on that façade is higher near the top than at the bottom of the façade. As a result, the wind flows down the façade and forms the vortex upwind of the building shown in the figure. This vortex is stretched and accelerated as it goes around the two upwind lower corners, causing the accelerated flow areas (A) shown on the left hand side of Figure 4.

Similar accelerated areas also occur for winds blowing at the corners of the building (B in Figure 4).

Monolithic buildings (*i.e.* those that do not change shape with height), if they are significantly taller than most of the surrounding buildings, almost invariably will be windy at their bases. However, when there are many buildings of similar height in the area, they tend to shelter one another. Because the proposed buildings for both the Chapter 91 and Municipal Harbor Plans will be part of a grouping of buildings they will tend to shelter one another and the nearby Harborwalk for some wind directions. To avoid strong winds at the corners of these buildings, especially those facing the water, the tall part should be set back 20-30 feet from the street on a 2-3 story platform. The platform can come right to the street. This causes the strong pedestrian winds, which normally occur near the corners of the building (See Figure 5), to be on the roof of the platform rather than at street level. Otherwise, for winds off the water, one can expect the first buildings in from the water to be quite windy at the two corners nearest the water.

3.2 STATISTICAL DESCRIPTION OF THE BOSTON WIND CLIMATE

The project site is located about one mile WSW of Logan Airfield. Thus, the wind data from Logan Airfield traditionally used to define the winds for Boston is applicable. Figure 6 depicts a wind rose for Boston. The wind speeds are estimated at pedestrian level at the airport. The length of each line radiating from the center of the figure to the outermost crossing line is proportional to the total time the wind comes from that direction. The other lines crossing the radial lines indicate the frequency of winds less than 7, 10, and 15 mph. As noted in the figure, the wind rose is based on surface wind data from Logan Airfield taken from 1945 to 1965. Data from 1965 to 1999 is also available, but it is not believed to be as representative of the true winds in Boston. Many 25 to 40-story buildings have been built in the financial district of Boston since 1965. The financial district is just one mile W of Logan Airfield.

Figure 6 shows that the winds in Boston come primarily from the NW, W, and SW. Figures 7 through 10 show pedestrian level wind roses for Boston for winter (Dec., Jan., and Feb.), spring (Mar., Apr., and May), summer (Jun., Jul., and Aug.), and fall (Sept., Oct., and Nov.). These figures show that NW winds tend to occur during the colder months and SW winds during the warmer months. Spring and fall are transitional, but winds are stronger in the spring than in the fall. Strong easterly winds usually occur during storms when there is precipitation.

The average wind speed at Logan Airfield at 58 feet (the average height at which the data was taken) is 12.9 mph. At pedestrian height (i.e. at chest height, 4.5 feet) it is about 8.6 mph. The average wind speeds at 58 and 4.5 feet at Logan Airfield for each month are shown in Figure 11. Seasonally, the average at pedestrian level is 9.4 mph in the winter, 9.2 mph in the spring, 7.4 mph in the summer, and 8.2 mph in the fall.

4.0 CRITERIA

Since the early 1980s, the BRA has used a guideline criterion for acceptable winds of not exceeding a 31 mph effective gust more often than once in one hundred hours. The effective gust is defined as the average wind speed plus 1.5 times the root mean square variation about the average. The effective gust can be shown to be about the fastest one-minute gust in an hour. When many stations are considered, the effective gust averages about 1.4 times the average hourly wind speed.

In 1978, Melbourne [3] developed probabilistic criteria for average and peak PLWs which accounted for different types of pedestrian activity as well as the safety aspects of such winds. Durgin [4] has reinterpreted his criteria to apply to Equivalent Average winds (Figure 12). The Equivalent Average used in this figure is similar to an hourly average, but combines the effects of steady and gusting winds. Five categories of PLWs are defined:

- 1) Comfortable for Long Periods of Standing or Sitting;¹
- 2) Comfortable for Short Periods of Standing and Sitting;
- 3) Comfortable for Walking;
- 4) Uncomfortable for Walking;
- 5) Dangerous and Unacceptable.

These criteria are not absolute (any location can have dangerous winds in a major storm or hurricane). Rather, they imply that the location would have wind speeds such that the activity suggested is possible most of the time, and would be perceived as such, by most people who frequent the location. For example, the PLWs at pedestrian level at Logan Airfield, while in Category 4 (uncomfortable for walking), are almost in Category 3 (comfortable for walking) (see Figure 12). But they are well under the BRA 31 mph effective gust wind speed guideline

¹ The numbering system for the Categories was reversed in December, 1999. Before December, 1999, the slowest winds were in Category 5 and the fastest in Category 1. Since the December, 1999, the slowest are in Category 1 and the fastest in Category 5.

(converted to an equivalent average wind), which is in the middle of Category 4. Therefore, most people would perceive conditions in the open at Logan Airfield as marginally comfortable for walking.

5.0 PEDESTRIAN LEVEL WINDS AT THE SITE

5.1 INTRODUCTION

The objective of this study is to examine and compare the effects of representative buildouts of the Chapter 91 and Municipal Harbor Plans on pedestrian winds along the Harborwalk and in the two adjacent parks. We only have basic building massings and heights, but know nothing about detailed building shapes or the location of entrances. But building shape, and the location and configuration of entrances, both affect pedestrian winds and pedestrian traffic near a building. Thus any discussion of pedestrian winds close to any of the representative buildings would be premature. Where there are groups of buildings such as on Fan Pier – Pier Four and SE of Summer Street, their exact shape is not as important as their massing and height in terms of how they will affect pedestrian winds on the adjacent Harborwalk and parks. That is what will be discussed below.

In the following sections, the effects of NW winter winds, SW summer winds, and easterly storm winds will be discussed for no build and representative buildouts of the Chapter 91 and Municipal Harbor Plan options.

The estimated categories for all locations and wind directions for no build and build conditions are shown in Figures 13 to 22. The results for all locations and wind directions are tabulated in Table 1 and summarized in Tables 2 and 3. Table 2 indicates both the number of locations that will not change category and those that will change up or down 1 or 2 categories. Table 3 lists each location for which the PLW is expected to change and what that change is expected to be.

As noted in the introduction, a wind tunnel study was done for a proposed project in the Fan Pier – Pier Four area in 1986 [1]. The configuration of the proposed buildings was quite different than either of the configurations being considered here. However, the only currently existing building in the Fan Pier area today that wasn't there in 1986 is the Federal Court House. Thus, much of the data for existing conditions from that study is still applicable today. The data shown for the Fan Pier

- Pier four area for the no build conditions in Figures 13, 16, 19, 22, and 25 is based on the existing condition results of that 1986 study.

For the most part, the weather in New England is dominated by either large coastal storms (fall, winter, and spring) or the Bermuda High (summer). Typically, when a coastal storm occurs, it rains or snows for 4 to 12 hours, then it clears, and, as the storm moves to the NE, the winds blow from the NW for three or four days until the next weather system arrives. These storms and the NW winds following them occur mostly in the fall, winter, and spring. NW winds are particularly uncomfortable in the winter, when typically they occur on cold days. The Bermuda High is generally responsible for the SW winds that occur in the summer.

5.2 NORTHWEST (WINTER) WINDS

5.2.1 Introduction

Congress and Summer Streets run approximately from WNW to ESE. Thus, NW winds quarter from the north across both streets (Figure 13). The estimated categories for all locations for no build and both representative buildout conditions are shown in Figures 13, 14, and 15.

5.2.2 NW Winds: Discussion (Figures 13, 14, and 15)

For NW winds, 19 of the 26 locations considered are not expected to change category for the Chapter 91 buildout, and 17 are not expected to change category for the Municipal Harbor Plan buildout. For both buildouts, 5 locations (14, 15, 16, 24, and 25) are predicted to have their category drop from 2 to 1 due to sheltering. For the Chapter 91 buildout, the PLW category at location 23 is also predicted to drop from 2 to 1 due to sheltering, whereas for the Municipal Harbor buildout 23 will continue to be in Category 2 because of the taller buildings. Location 20, because it is at the corner of a building for the Municipal Harbor buildout, will rise from 2 to 3. It does not for the Chapter 91 buildout, because it is not at a corner. Location 19 is in the middle of a building façade for both buildouts, but because of the added height (55 to 100 feet) and the quartering NW winds, the PLW category increases from 2 to 3 for the Municipal Harbor buildout.

5.3 SOUTHWEST (SUMMER) WINDS

5.3.1 Introduction

The prevailing winds in the summer are from the SW. SW winds blow nearly parallel to the Fort Point Channel, but quarter slightly from the N. It should be borne in mind that, on hot summer days, some windiness may be desirable. The estimated categories for all locations for existing and both buildout conditions are shown in Figures 15, 16, and 17.

5.3.2 SW Winds: Discussion (Figures 16, 17, and 18)

For SW winds 13 of the 26 locations considered are not expected to change category for the Chapter 91 buildout, and 11 are not expected to change category for the Municipal Harbor Plan buildout. For both buildouts, 6 locations (12, 13, 16-18, and 23) all are expected to have their category change from 3 to 1 due to sheltering effects of the buildouts in the Fan Pier – Pier Four area. In addition, the category of location 26 drops from 2-1 that of 19, 20, and 25 drop from 3 to 2; and 21 rises from 2 to 3 for both buildouts. For the Municipal Harbor Plan, buildout, locations 4 and 7 rise from Category 2 to 3. The category of locations 14 and 15 drop from 3 to 1 for the Chapter 91 buildout, but only from 3 to 2 for the Municipal Harbor Plan buildout. Thus, as for NW winds, the Harborwalk is just a little less windy for the Chapter 91 buildout than for the Municipal Harbor Plan build out.

5.4 EASTERLY STORM WINDS (Figures 19-27)

5.4.1 Introduction

Easterly winds occur about one third of the time. Light easterly winds occur as a storm starts or in the summer as a sea breeze. During the first 4-12 hours of a typical coastal storm, it rains or snows depending on the temperature and the wind is from the NE or SE depending on whether the center of the storm passes to the east or west of the city.

Since for strong easterly winds, it will generally be raining or snowing, and people expect it to be windy, the emphasis in evaluating the effect of the two options should be on entering or exiting the various buildings. Also, because easterly winds cover such a wide range of wind directions, the discussion will cover NE, E, and SE winds separately in that order.

5.4.2 NE Storm Winds

5.4.2.1 Introduction

NE winds are the most common of the easterly winds. They approach the site in the opposite direction as SW winds: that is, NE winds blow down the Fort Point Channel, but quarter slightly from the S (Figure 15). The estimated categories for all 26 locations for existing and both buildout conditions are shown in Figures 18, 19, and 20.

5.4.2.2 NE Storm Winds: Discussion. (Figures 19, 20, and 21)

For NE winds 19 of the 26 locations considered are not expected to change category for the Chapter 91 buildout, and 18 are not expected to change category for the Municipal Harbor Plan buildout. The predicted category at locations 14, 15, and 24 is expected to rise from 3 to 4 and at location 26 to drop from 2 to 1 for both buildouts. The category at locations 1 and 20 drops from 2 to 1 for the Chapter 91 buildout, but that of location 1 is unchanged and that of location 20 rises from 2 to 4 for the Municipal Harbor Plan buildout. Location 20 is sheltered by the 55 foot building to its SE for the Chapter 91 buildout, but is at the corner of a 100 foot building for the Municipal Harbor Plan buildout. The category at location 19 drops from 3 to 1 for the Chapter 91 buildout, but only from 3 to 2 for the Municipal Harbor Plan build out. Also for the Municipal Harbor Plan buildout the PLW category at location 4 drops from 3 to 2, and that at location 17 from 4 to 3. So again we see that for the Chapter 91 buildout, the Harborwalk is just a little less windy than for the Municipal Harbor Plan build out.

5.4.3 E Storm Winds

5.4.3.1 Introduction

E winds blow from right to left in Figures 22 to 24. The estimated categories for all locations for existing and both build conditions are shown in Figures 22, 23, and 24.

5.4.3.2 E Storm Winds; Discussion. (Figures 22, 23, and 26)

For E winds, 13 of the 26 locations considered are not expected to change category for the Chapter 91 buildout and 12 locations for the Municipal Harbor Plan buildout. The predicted PLW categories at locations 1, 2, 3, 5, and 7 are expected to change from 2 to 1, those at locations 17 and 19 from 3 to 1 and those at locations 6, 9, 18, and 25 from 3 to 2 for both buildouts. Location 20's Category lowers from 2 to 1 for the Chapter 91 build out, but increases from 2 to 4 for the Municipal

Harbor Plan buildout. Again this happens because the location is sheltered by the 55 foot building for the Chapter 91 buildout and at the corner of the 100 foot building for the Municipal Harbor Plan buildout. Location 16 is slightly more sheltered for the Chapter 91 buildout (Category 2) than for the Municipal Harbor Plan buildout (Category 3). The buildings along Pier Four are taller (100 and 200 feet) and closer to the Harborwalk for the Municipal Harbor Plan buildout than for the Chapter 91 buildout (55 feet). Thus, the PLW categories for locations 23 and 24 are expected to increase from 3 to 4 for the Municipal Harbor Plan buildout, but stay at 3 for the Chapter 91 buildout.

5.4.4 SE Storm Winds

5.4.4.1 Introduction

SE winds are the least common of the easterly winds. They blow the opposite of NW winds: that is, they blow nearly perpendicular to the Fort Point Channel quartering slightly from the S. The estimated categories for all locations for existing and both build conditions are shown in Figures 26, 25, and 26.

5.4.4.2 SE Storm Winds; Discussion. (Figures 25, 26, and 27)

For SE winds 17 of the 26 locations considered are not expected to change category for the Chapter 91 buildout; and 11 locations for the Municipal Harbor Plan buildout will not change. The predicted PLW categories at locations 1, 2, 3, 7, 10, 17, 18, 19, and 25 are expected to change from 2 to 1 for both buildouts. For the Municipal Harbor Plan buildout the category of locations 14, 15, and 16 will also change from 2 to 1, and that at location 23 will change from 2 to 3. But the category at locations 20 and 24 will rise from 1 to 2.

6.0 SUMMARY AND CONCLUSIONS

An assessment has been made to compare the relative effects on pedestrian level winds (PLWs) of representative buildouts of the Chapter 91 and Municipal Harbor Plans. Since how each building will affect winds locally will depend on its height and exact shape, and how the winds interact with it and other nearby buildings, the emphasis is on the effects of these buildouts on the Harborwalk and two small adjacent parks. In general, the addition of these buildings will tend to reduce PLWs at more locations along the Harborwalk and in the parks than it increases them. The Chapter 91 buildout provides slightly more reduction in PLWs along the Harborwalk than the Municipal Harbor Plan

buildout. Comments are made on the relative effects of different types of building massings (Section 3).

As presented in Figure 19, most locations on Fan Pier are in Category 4 (uncomfortable for walking) for NE winds and no build conditions. This was also true for NE winds in Reference 1, but over all (that is, combining the results for all directions), all those locations were in Category 3 (comfortable for walking). Also, for strong NE winds it is usually raining or snowing so that it is unlikely that people will want to be on the Harborwalk.

7.0 REFERENCES

- 1) Durgin, F.H., Burns, J.H. and Busch, J.J., "A Wind Tunnel Study of Pedestrian Level Winds for the Fan Pier and Pier Four Developments: Phase I," Wright Brothers Wind Tunnel Report WBWT-TR-1221, M.I.T. Dept. of Aero. and Astro., Cambridge, MA, January, 1986.
- 2) Davenport, A.G., and Isyumov, N., "The Application of the Boundary Layer Wind Tunnel to the Prediction of Wind Loading", Proceedings of Intl. Seminar on Wind Effects on Buildings and Structures, Ottawa, Canada, September, 1967.
- 3) Melbourne, W.H., "Criteria for Environmental Wind Conditions", Journal of Industrial Aerodynamics, Vol.3, 1978, pp. 261-269.
- 4) Durgin, F. H., "Pedestrian Level Wind Criteria Using the Equivalent Average", Journal of Wind Engineering and Industrial Aerodynamics, Vol. 66 (1997), pp. 215-226.

TABLE 1

**ESTIMATED CATEGORIES
FOR ALL LOCATIONS ALONG THE HARBORWALK**

Loc.	NW			SW			NE			E			SE		
No.	NB	C91	MHP	NB	C91	MHP	NB	C91	MHP	NB	C91	MHP	NB	C91	MHP
1	1	1	1	2	2	2	2	1	2	2	1	1	2	1	1
2	1	1	1	2	2	2	2	2	2	2	1	1	2	1	1
3	1	1	1	3	3	3	1	1	1	2	1	1	2	1	1
4	1	1	2	2	2	3	3	3	2	1	1	1	1	1	1
5	2	2	2	3	3	3	3	3	3	2	1	1	1	1	1
6	1	1	1	3	3	3	2	2	2	3	2	2	2	2	2
7	1	1	1	2	2	3	3	3	3	2	1	1	2	1	1
8	2	2	2	2	2	2	4	4	4	1	1	1	1	1	1
9	2	2	2	2	2	2	4	4	4	3	2	2	1	1	1
10	2	2	2	1	1	1	4	4	4	3	3	3	2	1	1
11	2	2	2	2	2	2	4	4	4	3	3	3	2	2	2
12	3	3	3	3	1	1	4	4	4	3	3	3	2	2	2
13	3	3	3	3	1	1	4	4	4	3	3	3	2	2	2
14	2	1	1	3	1	2	3	4	4	3	3	3	2	2	1
15	2	1	1	3	1	2	3	4	4	3	3	3	2	2	1
16	2	1	1	3	1	1	4	4	4	3	2	3	2	2	1
17	2	2	2	3	1	1	4	4	3	3	1	1	2	1	1
18	2	2	2	3	1	1	4	4	4	3	2	2	2	1	1
19	2	2	3	3	2	2	3	1	2	3	1	1	2	1	1
20	2	2	3	3	2	3	2	1	4	2	1	4	1	1	2
21	3	3	3	2	3	3	4	4	4	3	3	3	2	2	2
22	3	3	3	1	1	1	4	4	4	3	3	3	2	2	2
23	2	1	2	3	1	1	4	4	4	3	3	4	2	2	3
24	2	1	1	2	2	1	3	4	4	3	3	4	1	1	2
25	2	1	1	3	2	3	4	4	4	3	2	2	2	1	1
26	1	2	2	2	1	1	2	1	1	2	2	2	2	2	2

TABLE 2

SUMMARY OF LOCATIONS THAT CHANGED CATEGORY

Direction	NW		SW		NE		E		SE	
Config.	C91	MHP	C91	MHP	C91	MHP	C91	MHP	C91	MHP
No Change	19	17	13	11	19	18	13	12	17	11
Up 1 Cat.	1	4	1	3	3	3	0	2	0	3
Up 2 Cat.	0	0	0	0	0	1	0	1	0	0
Down 1 Cat.	6	5	4	6	3	4	11	9	9	12
Down 2 Cat.	0	0	8	6	1	0	2	2	0	0

TABLE 3**LOCATIONS THAT CHANGED CATEGORY
AND HOW THEY CHANGED**

Wind Dir.	Category Change	Locations That Changed for Chapter 91 Buildout	Locations That Changed for Municipal Harbor Plan
NW	1-2	26	4, 26
	2-1	14, 15, 16, 23, 24, 25	14, 15, 16, 24, 25
	2-3		19, 20
SW	2-1	26	26
	2-3	21	4, 7, 21
	3-1	12, 13, 14, 15, 16, 17, 18, 23	12, 13, 16, 17, 18, 23
	3-2	19, 20, 25	14, 15, 19, 20, 25
NE	2-1	1, 20, 26	26
	2-4		20
	3-1	19	
	3-2		4, 19
	3-4	14, 15, 24	14, 15, 24
	4-3		17
E	2-1	1, 2, 3, 5, 7, 20	1, 2, 3, 5, 7
	2-4		20
	3-1	17, 19	17, 19
	3-2	6, 9, 16, 18, 25	6, 9, 18, 25
	3-4		23, 24
SE	1-2		20, 24
	2-1	1, 2, 3, 7, 10, 17, 18, 19, 25	1, 2, 3, 7, 10, 14, 15, 16, 17, 18, 19, 25
	2-3		23

Figure 1 Map of No Build Conditions Showing Building Heights and PLW Location Numbers

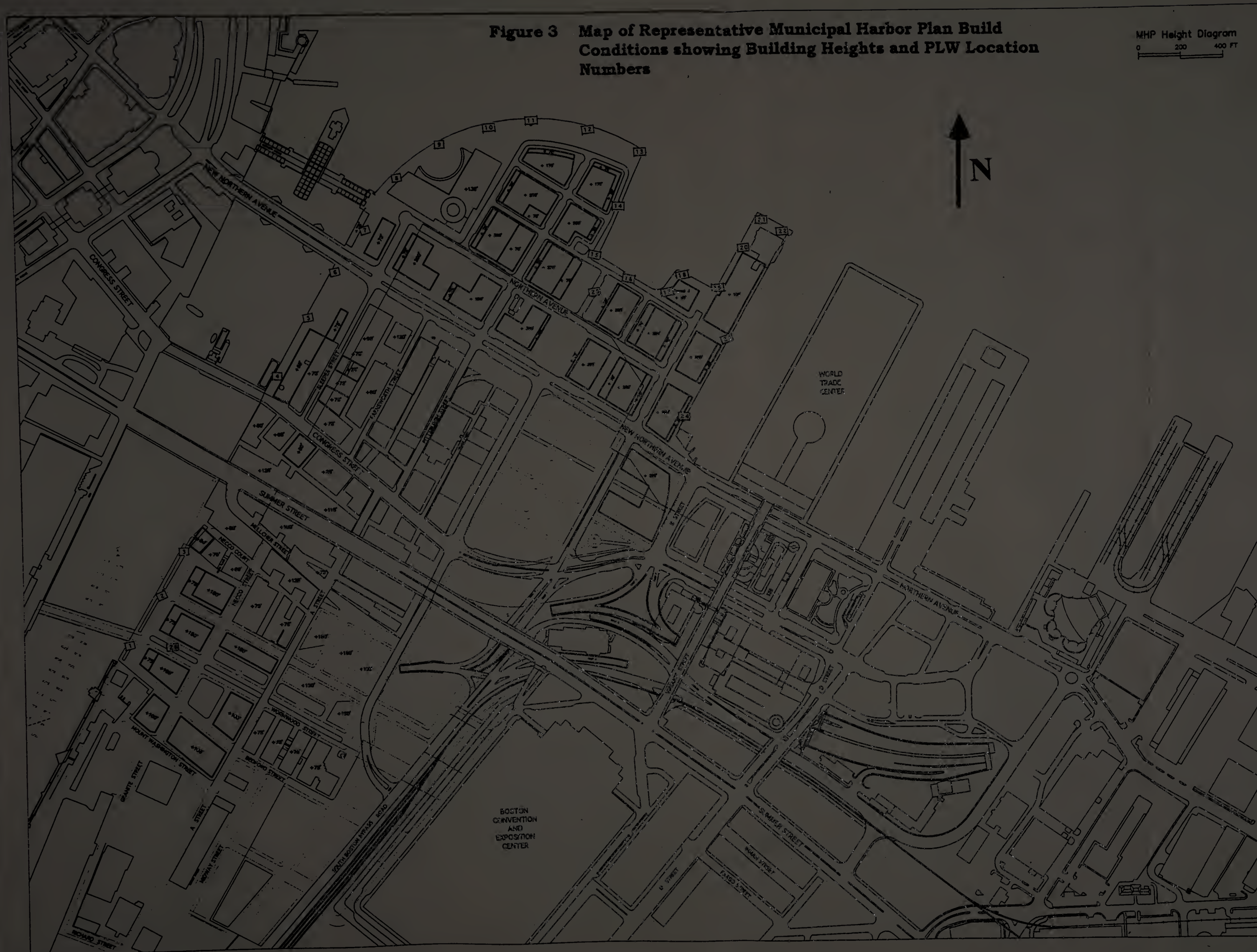
Figure 1

Figure 2

Figure 3

Figure 3 Map of Representative Municipal Harbor Plan Build Conditions showing Building Heights and PLW Location Numbers

MHP Height Diagram
0 200 400 FT



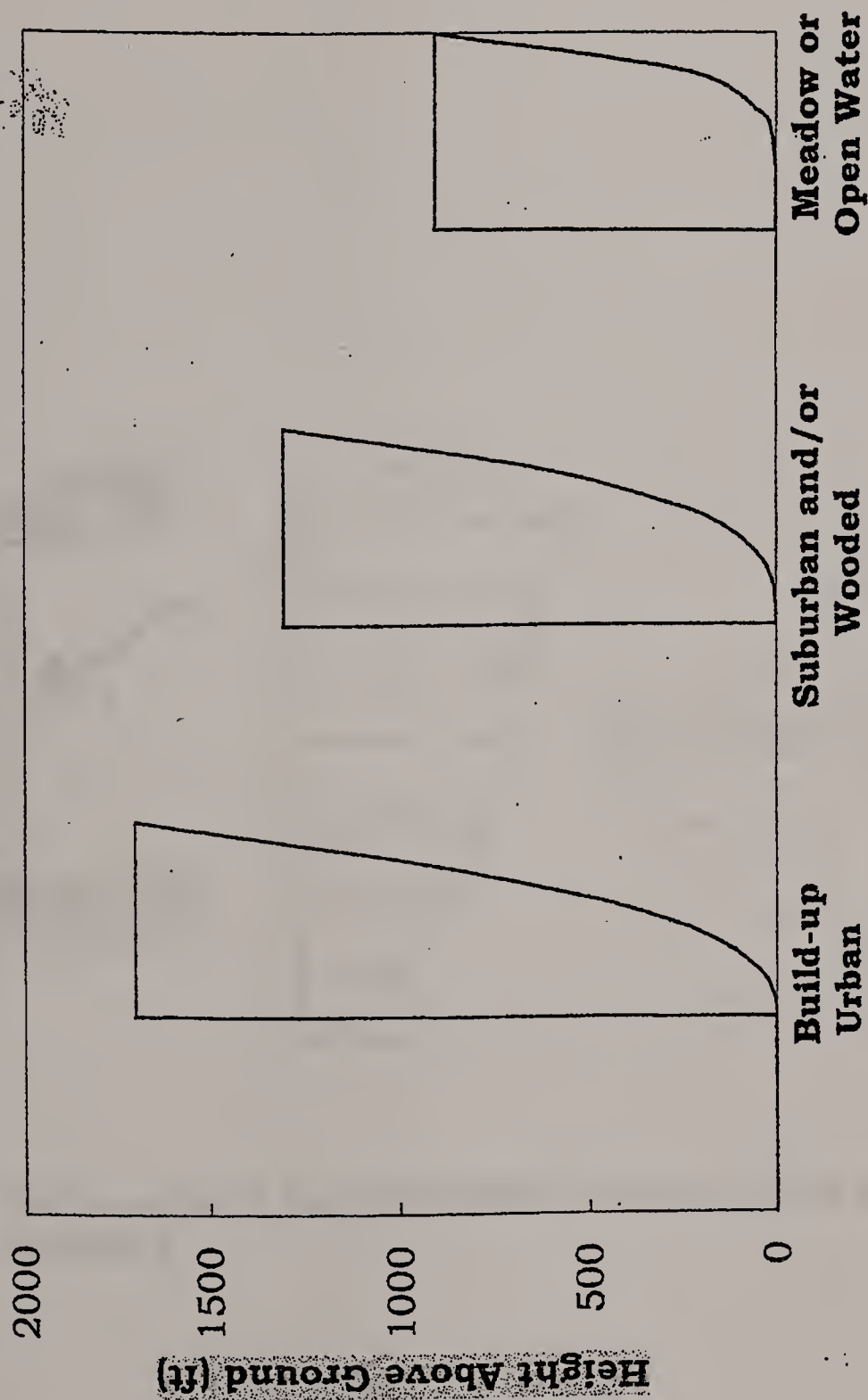


Figure 4 Types of Earth's Boundary Layer after Davenport [1]

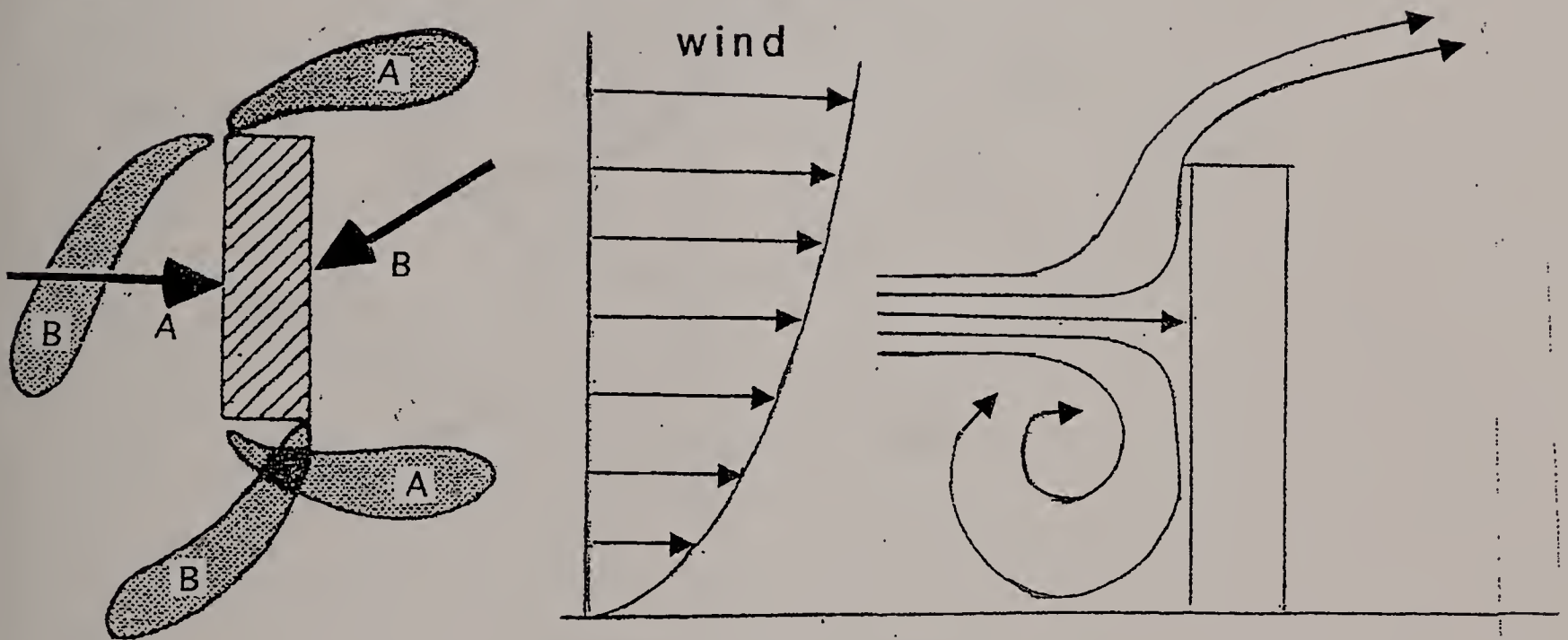


Figure 5 Schematic of how the Wind Interacts with an Isolated Building

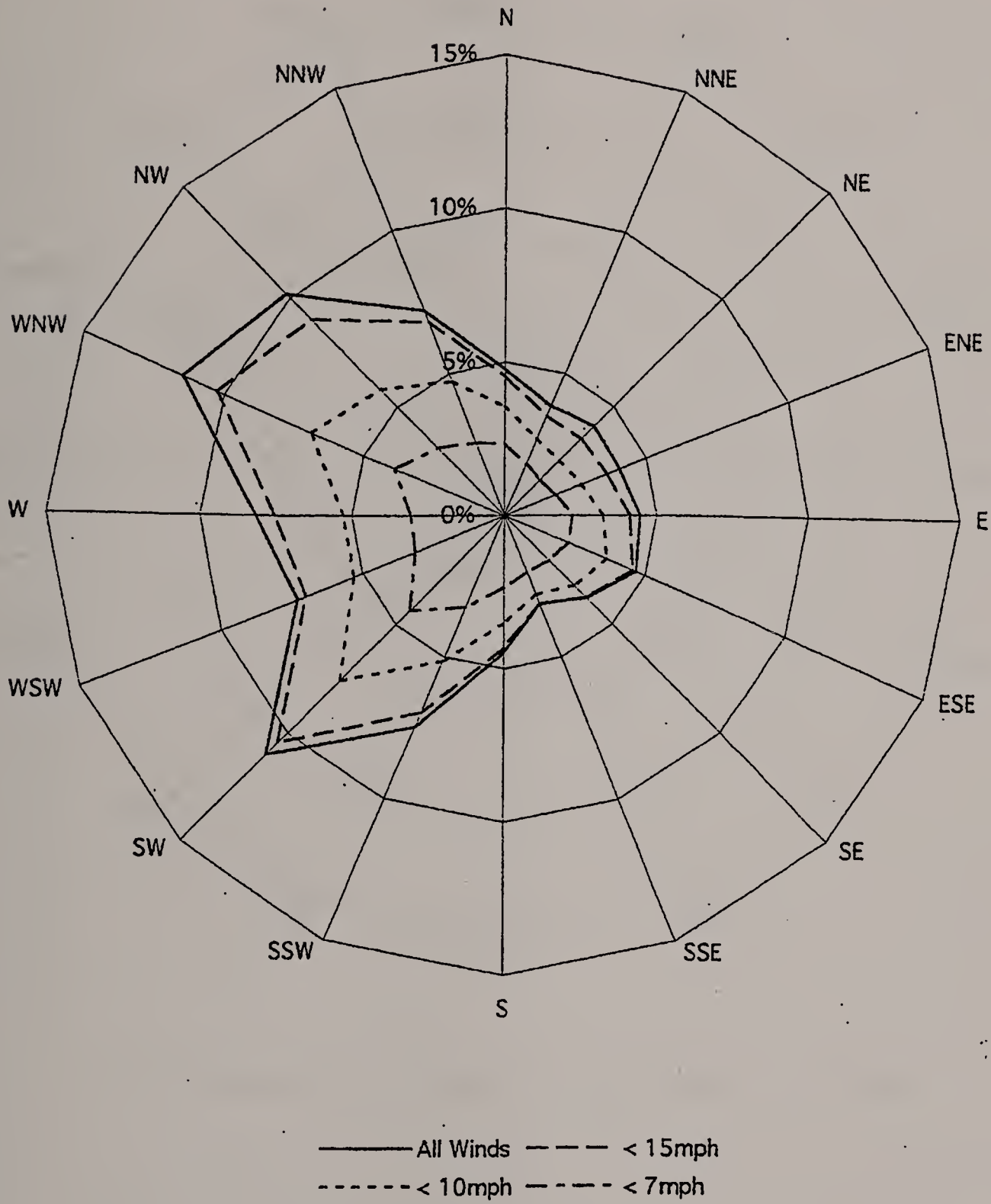


Figure 6 Annual Wind Rose for Boston Based on Surface Data from Logan Air Field 1945-1965

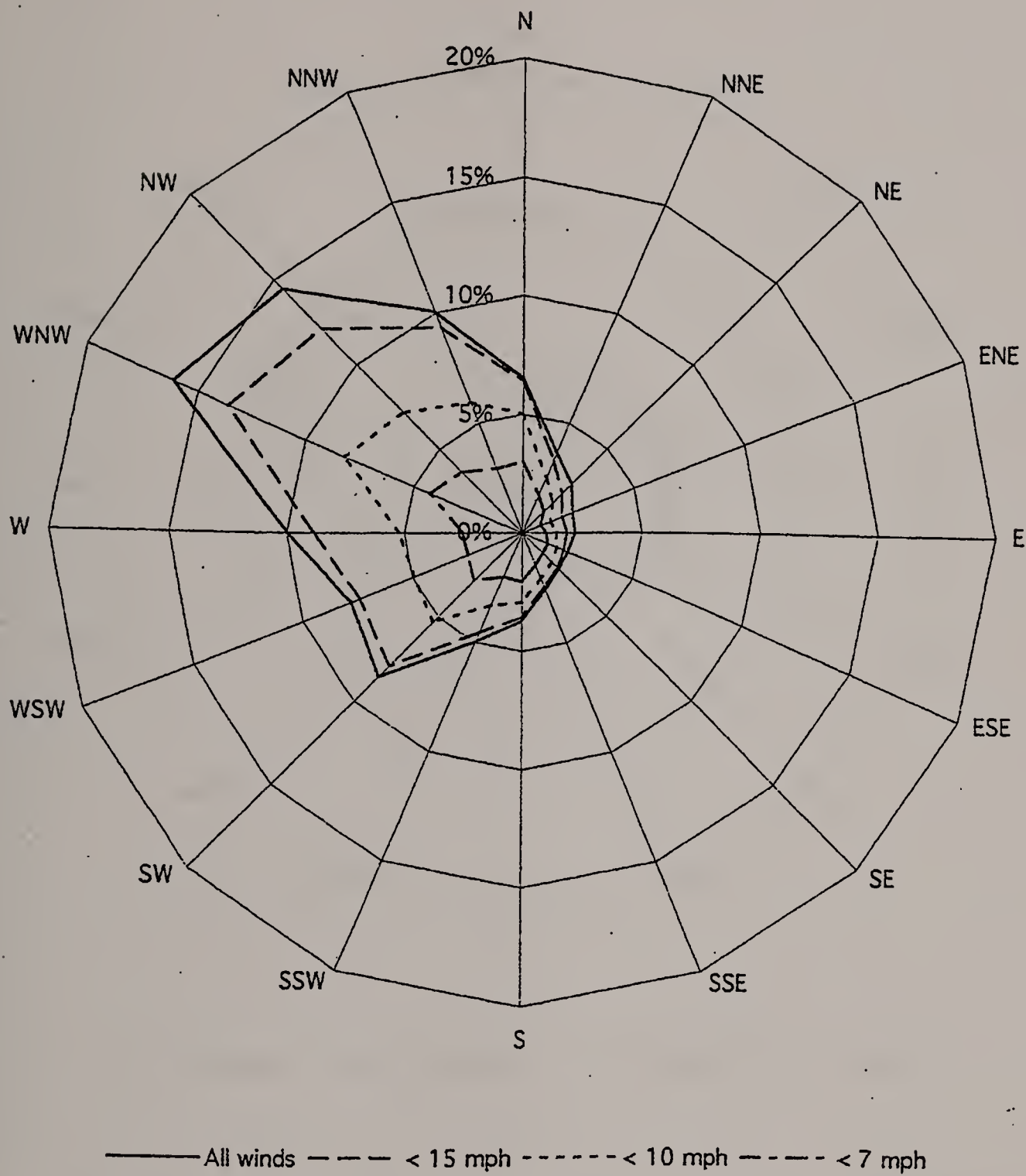


Figure 7 Winter (December, January, February) Wind Rose for Boston Based on Surface Data from Logan Air Field 1945-1965

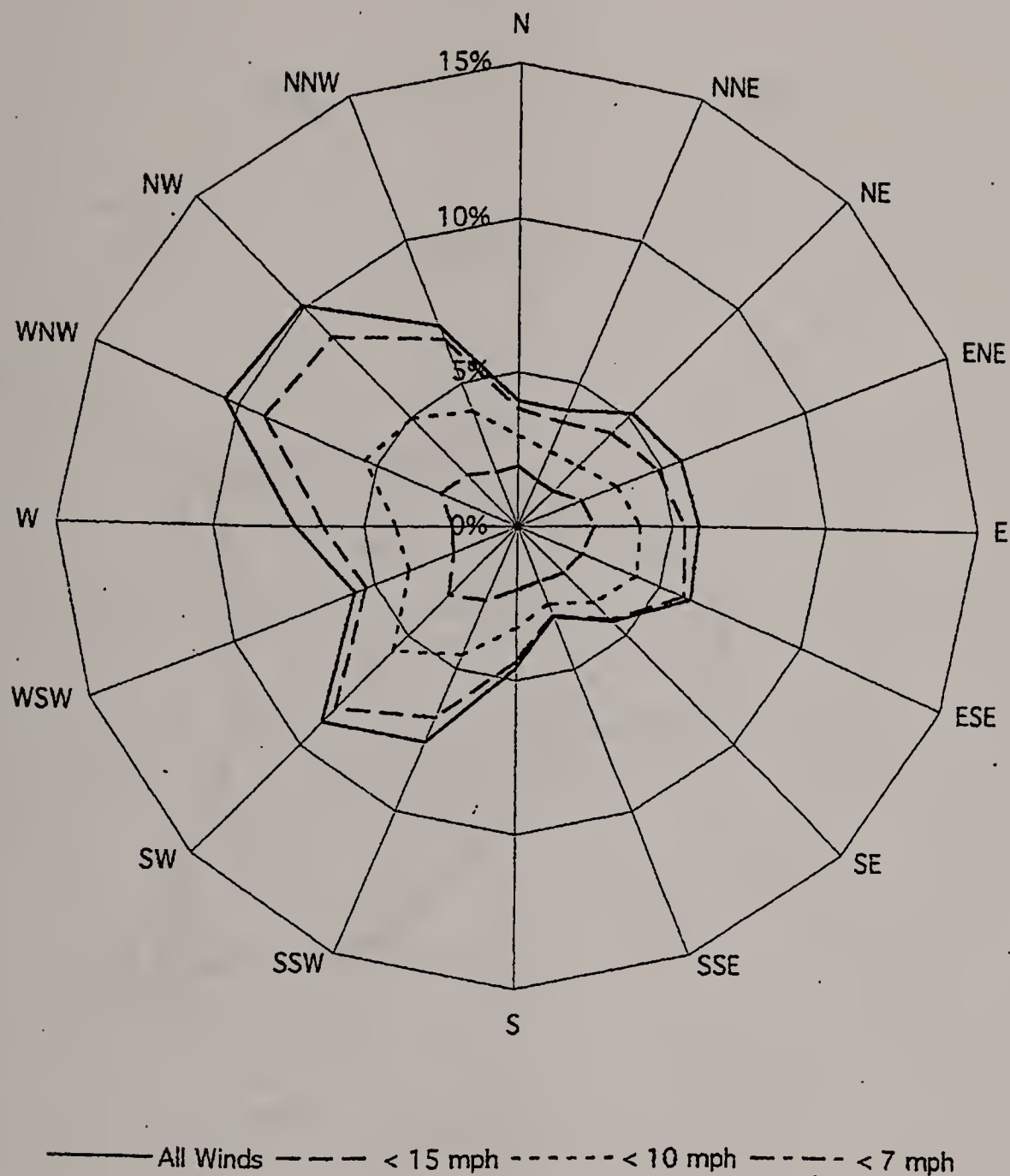


Figure 8 Spring (March, April, May) Wind Rose for Boston based on Surface Data from Logan Air Field 1945-1965

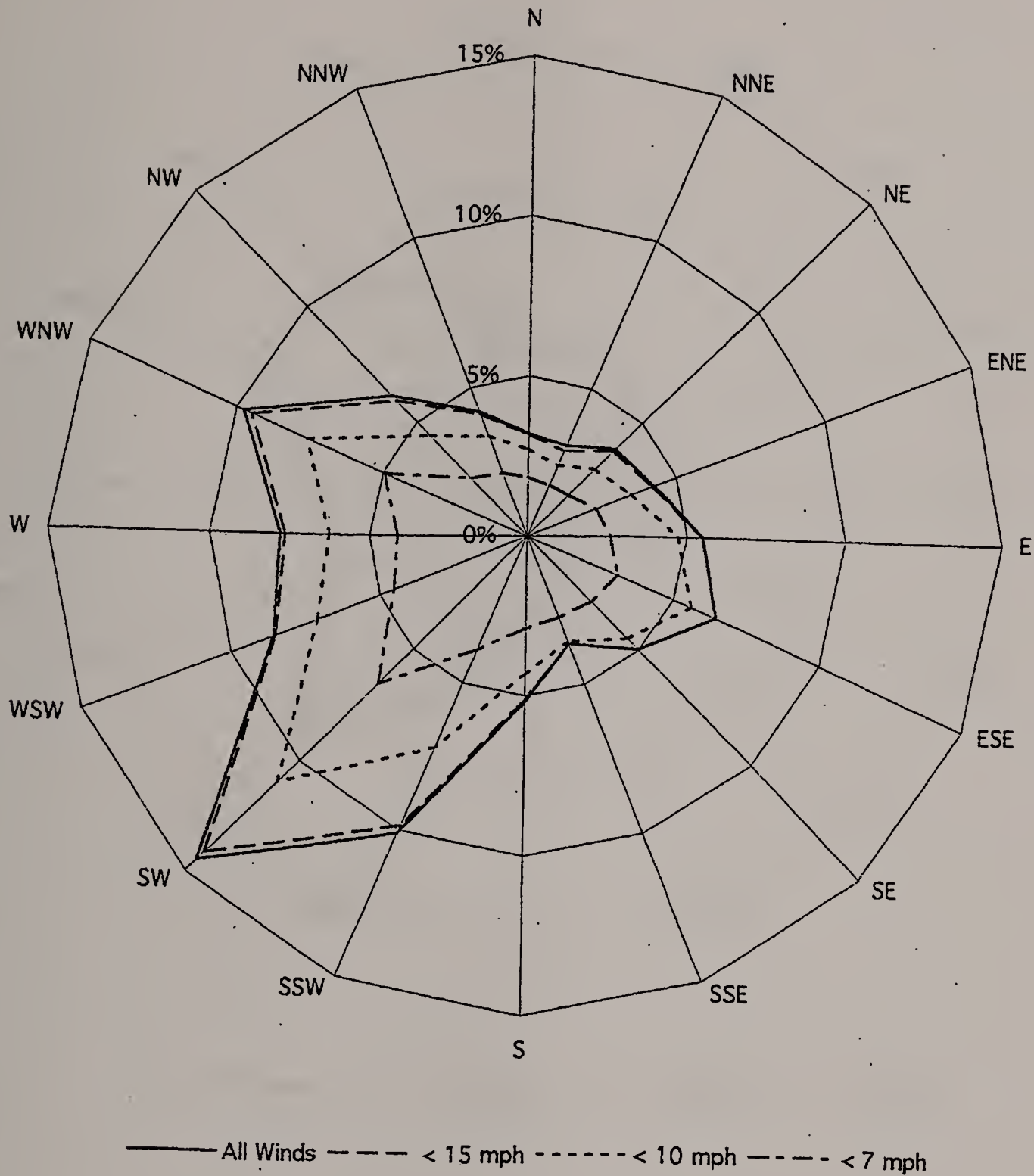


Figure 9 Summer (June, July, August) Wind Rose for Boston based on Surface Data from Logan Air Field 1945-1965

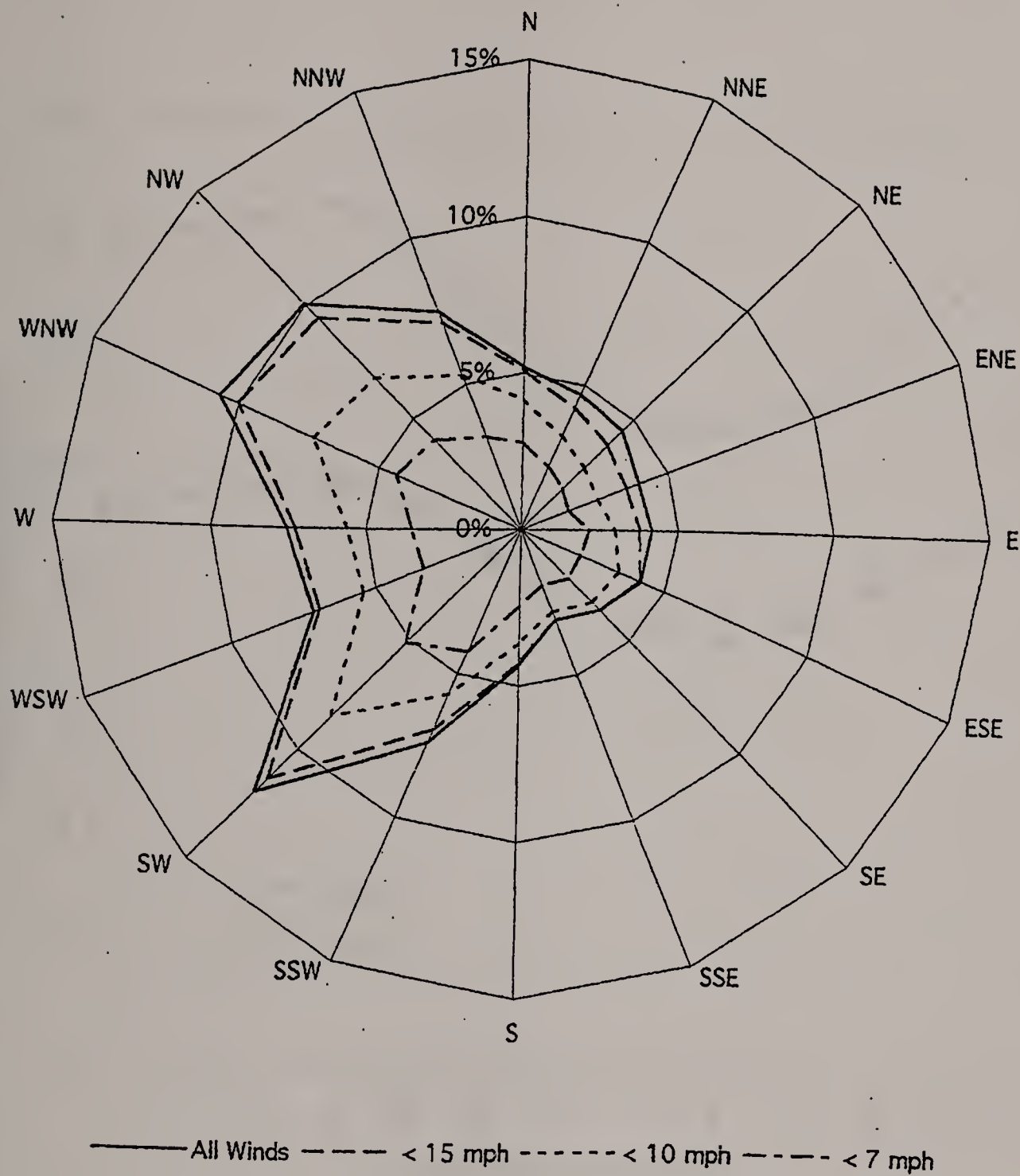
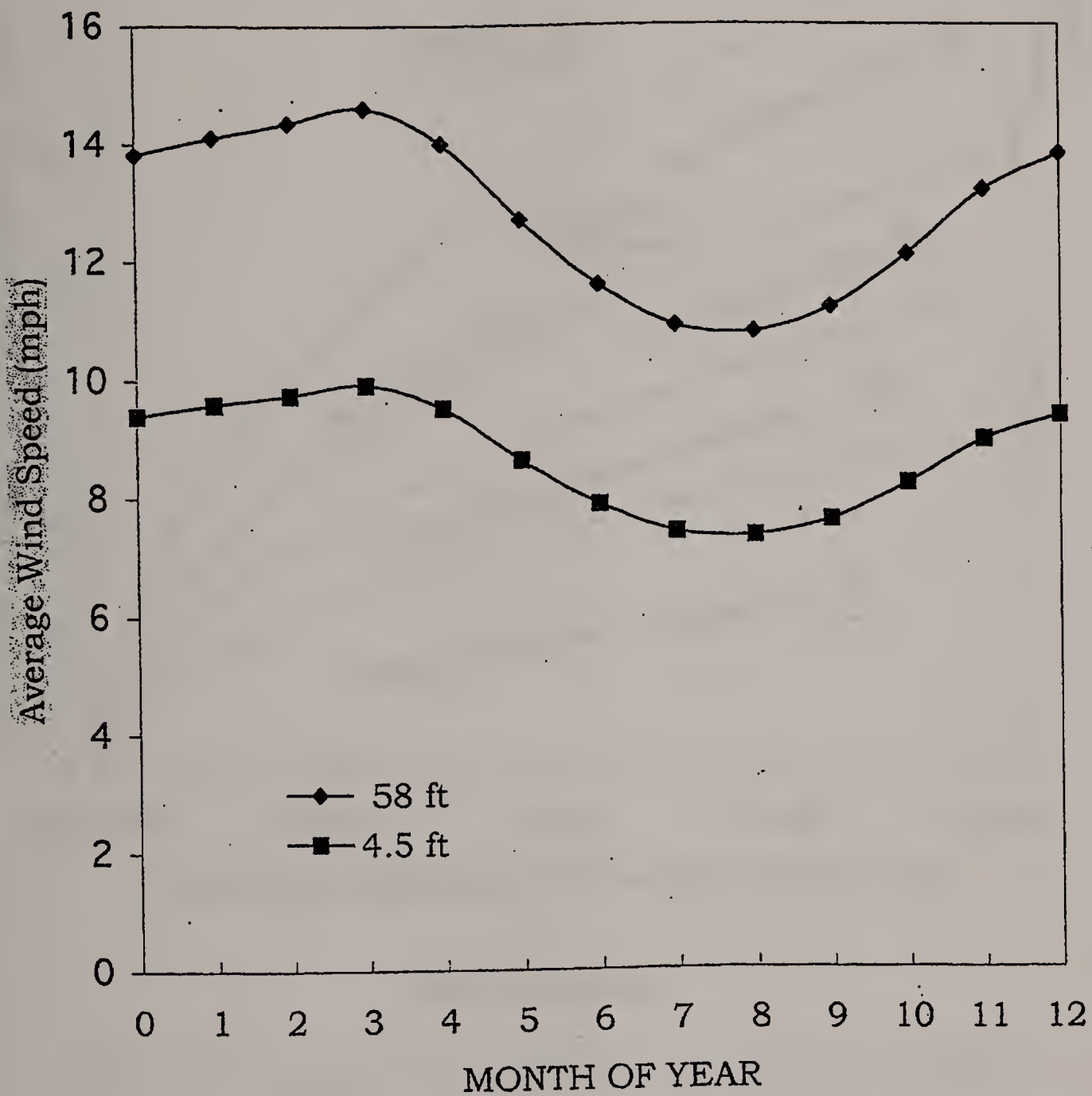
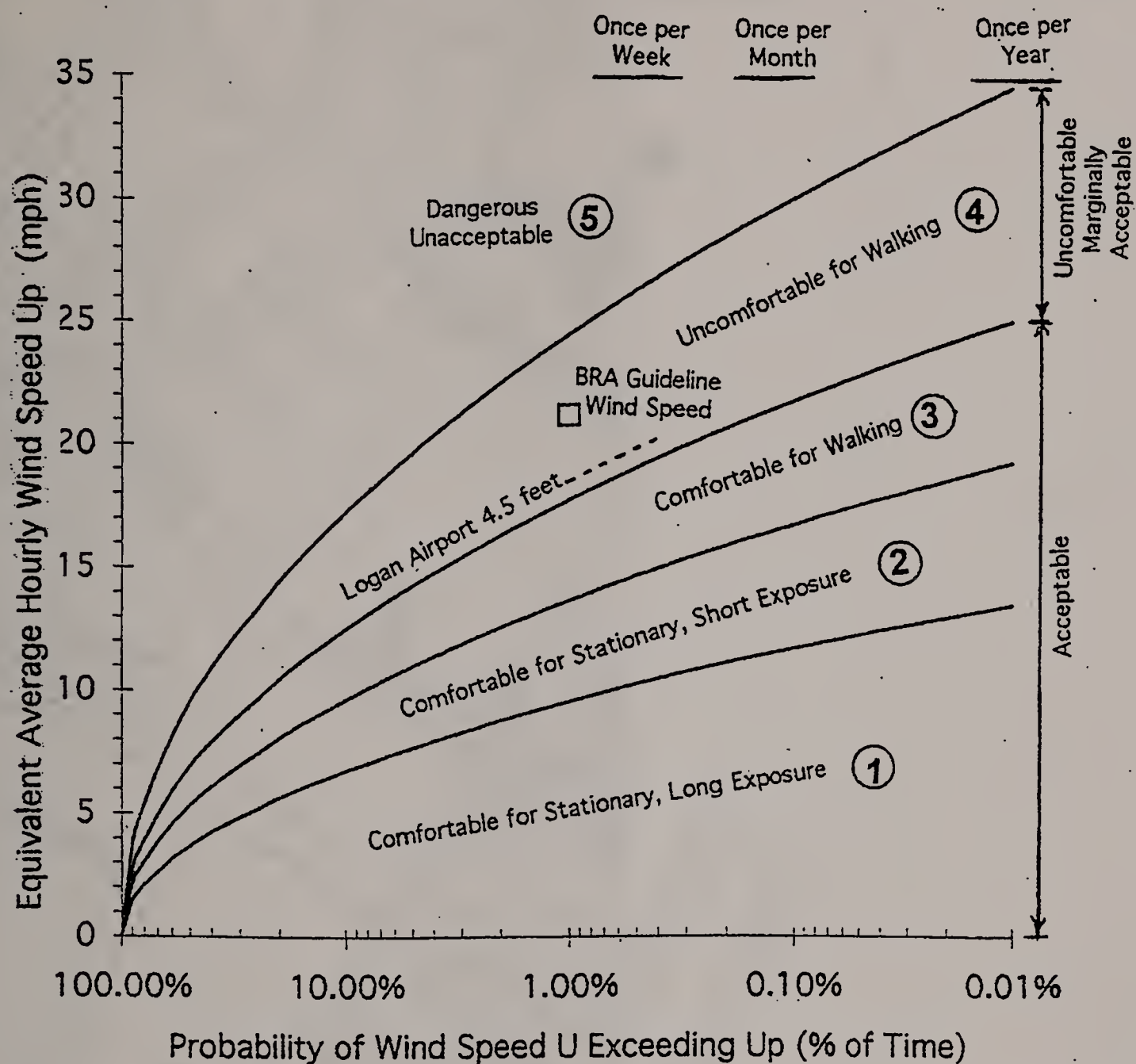


Figure 10 Fall (September, October, November) Wind Rose for Boston based on Surface Data from Logan Air Field 1945-1965



The Average Wind at 58 feet is 12.9 mph

Figure 11 Average Wind Speed for Boston for each Month, based on Surface Data from Logan Air Field 1945-1965



CATEGORIES:

- ① Comfortable for Long Periods of Standing or Sitting;
- ② Comfortable for Short Periods of Standing or Sitting;
- ③ Comfortable for Walking;
- ④ Uncomfortable for Walking;
- ⑤ Dangerous and Unacceptable.

Figure 12 Criteria for Equivalent Average Wind Speeds

Figure 13

Figure 13 Categories for No Build Conditions with NW Winds

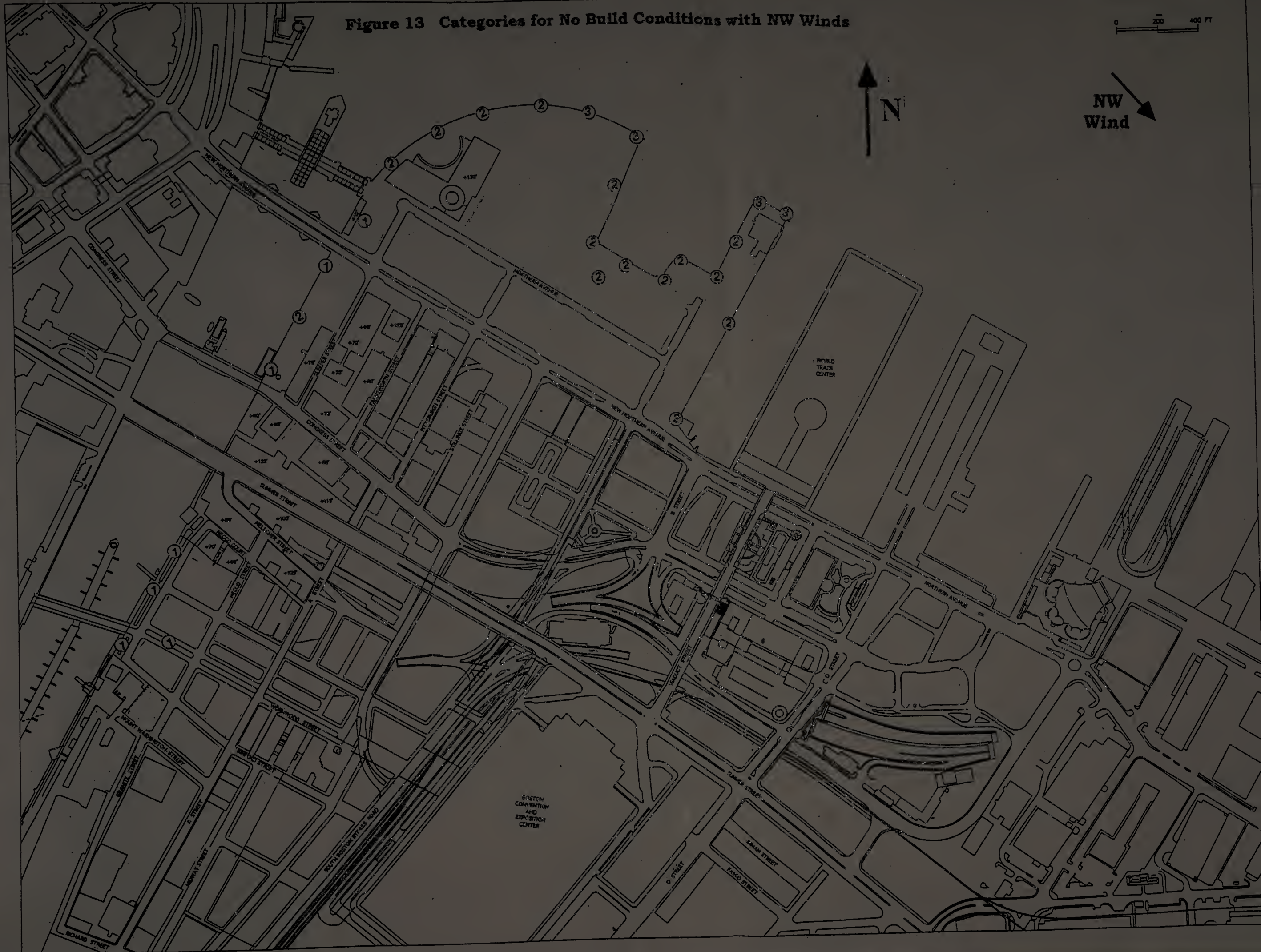
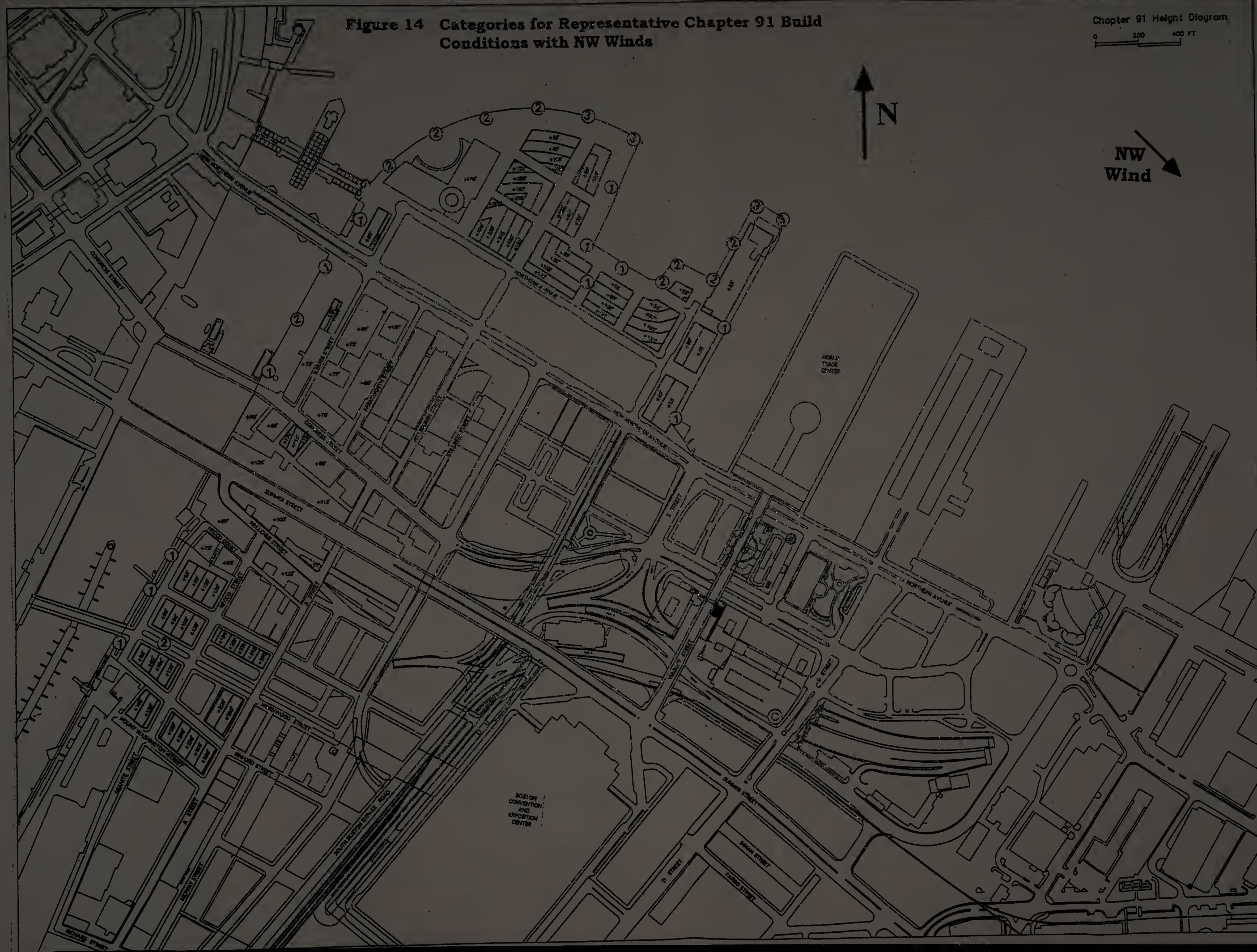


Figure 14 Categories for Representative Chapter 91 Build Conditions with NW Winds

Chapter 91 Height Diagram

0 200 400 FT

Figure 14



**Figure 15 Categories for Representative Municipal Harbor Plan
Conditions with NW Winds**

MSP Height Diagram
0 200 400 FT

Figure 15

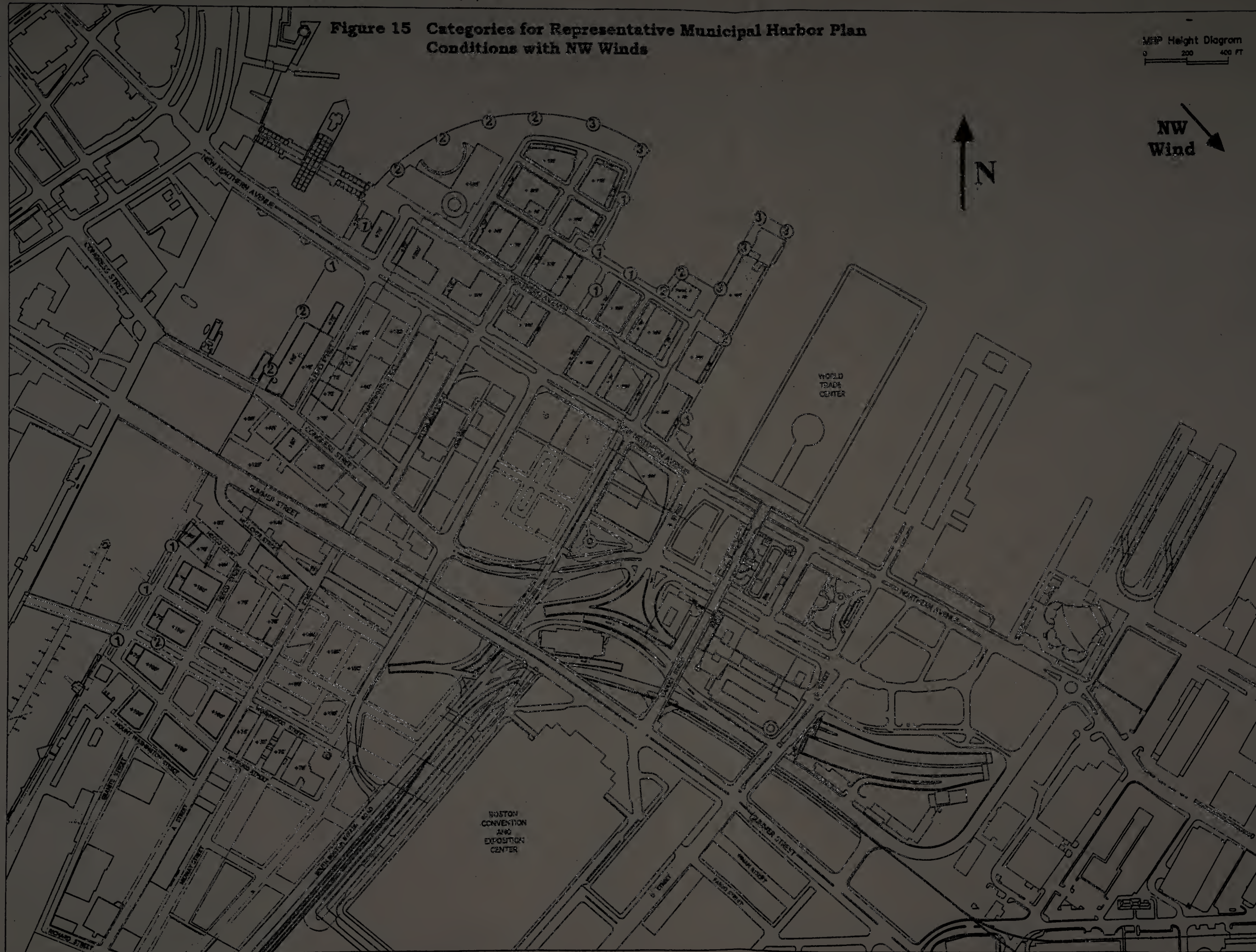


Figure 16 Categories for No Build Conditions with SW Winds

0 200 400 FT

Figure 16

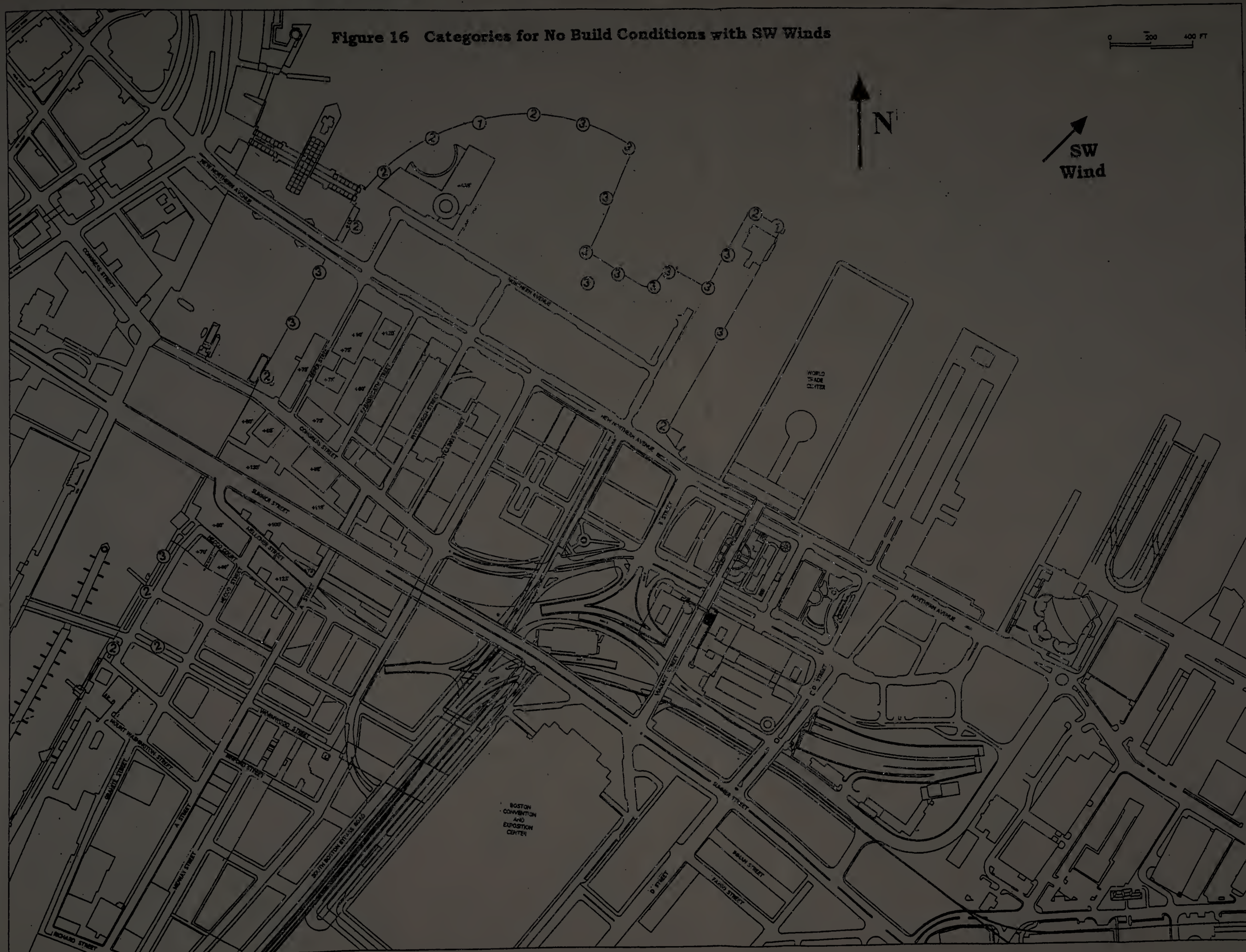


Figure 18 Categories for Representative Municipal Harbor Plan Conditions with SW Winds



Figure 18

Figure 19 Categories for No Build Conditions with NE Winds

0 200 400 FT

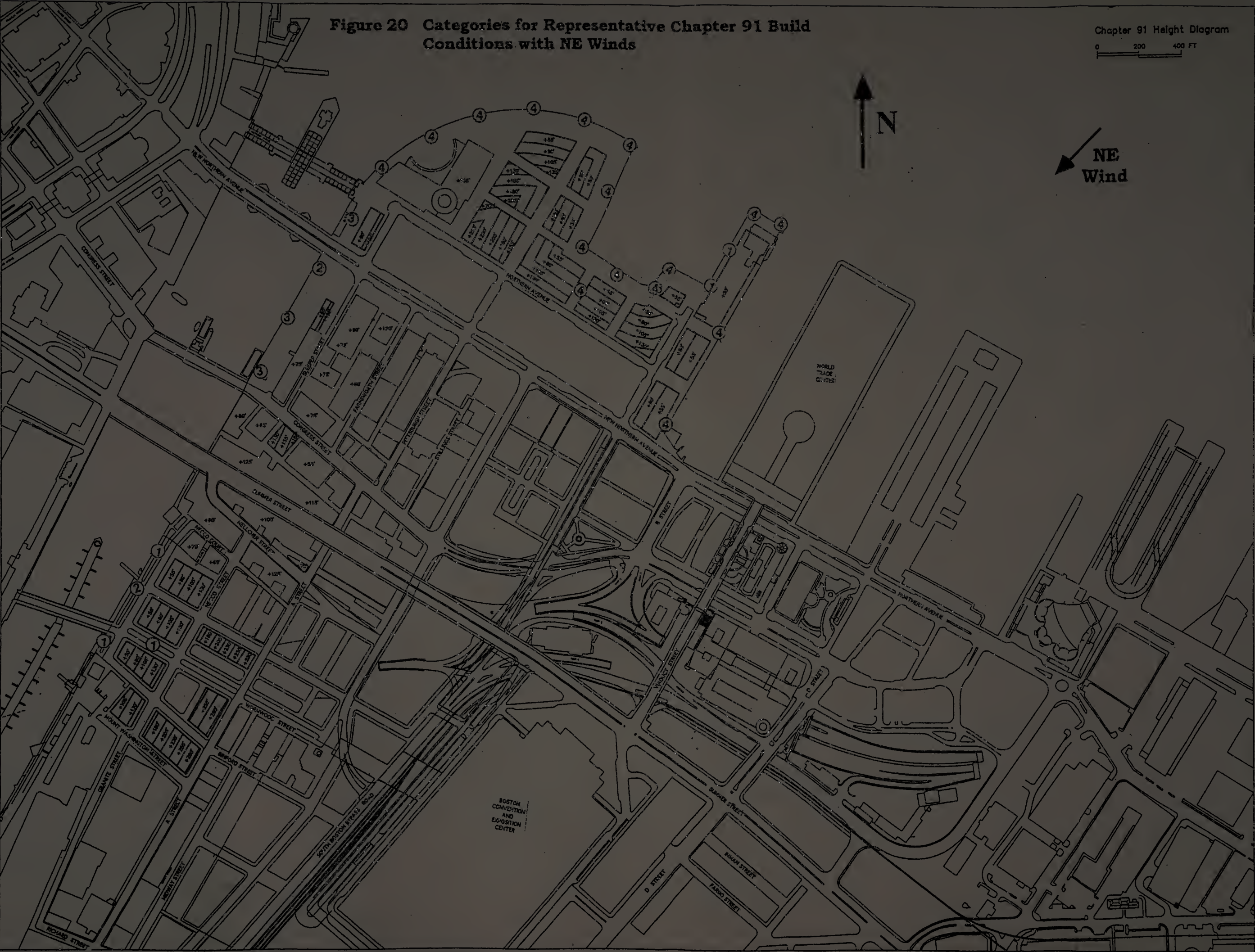
Figure 19



Figure 20 Categories for Representative Chapter 91 Build Conditions with NE Winds

Chapter 91 Height Diagram
0 200 400 FT

Figure 20



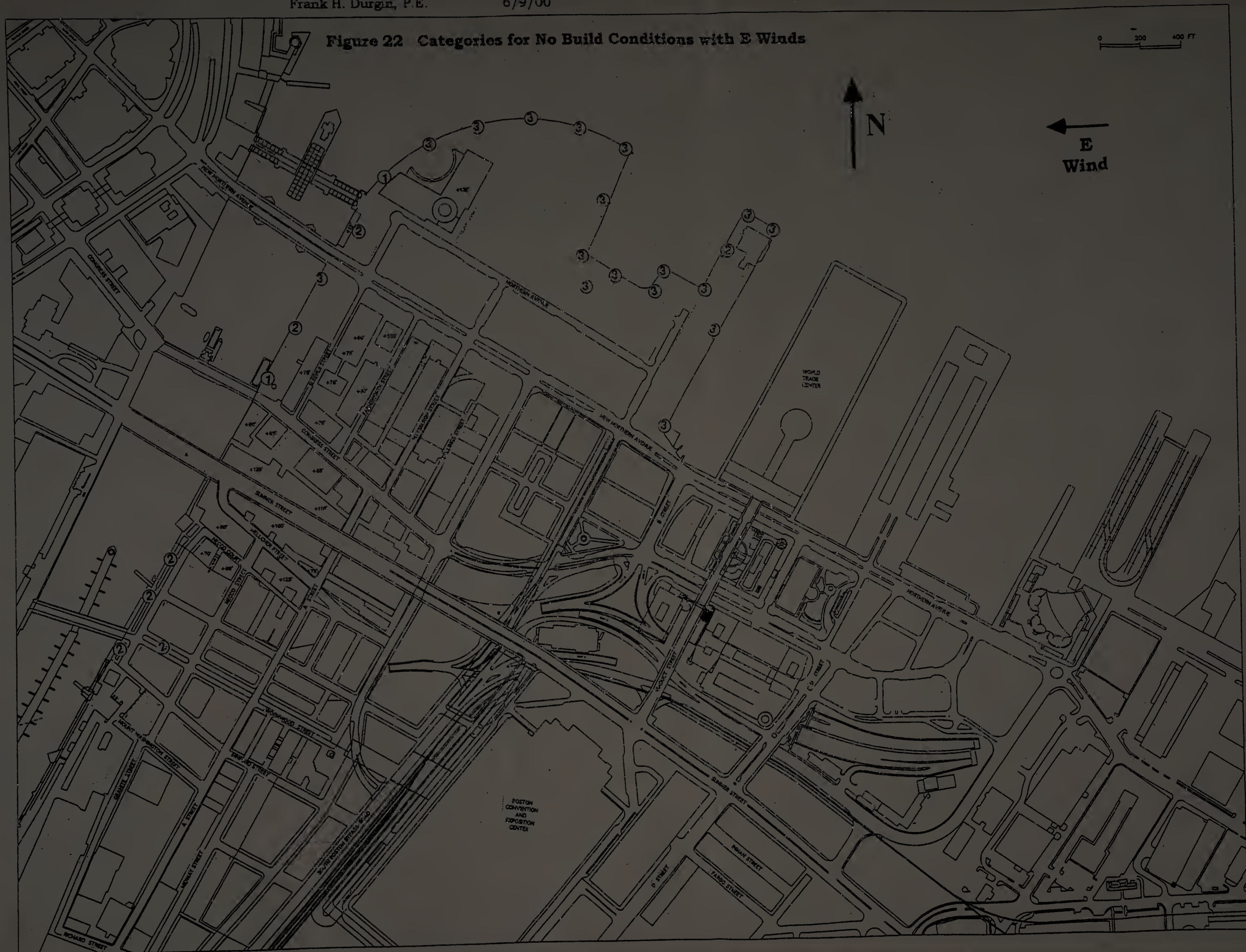


Figure 23 Categories for Representative Chapter 91 Conditions with E Winds

Chapter 91 Height Diagram
0 200 400 FT



**Figure 24 Categories for Representative Municipal Harbor Plan
Build Conditions with E Winds**

MHP Height Diagram
0 200 400 FT

Figure 24

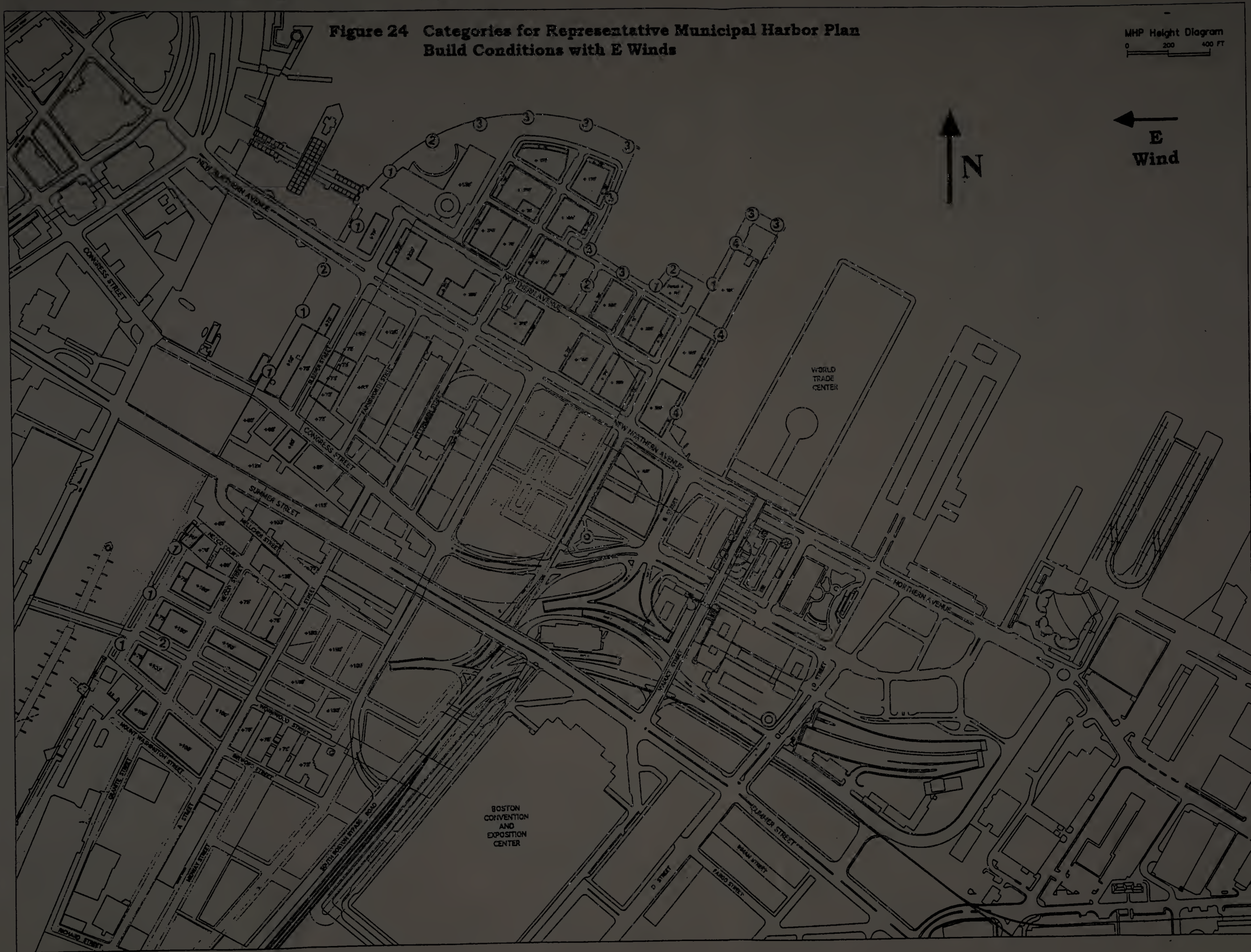


Figure 25

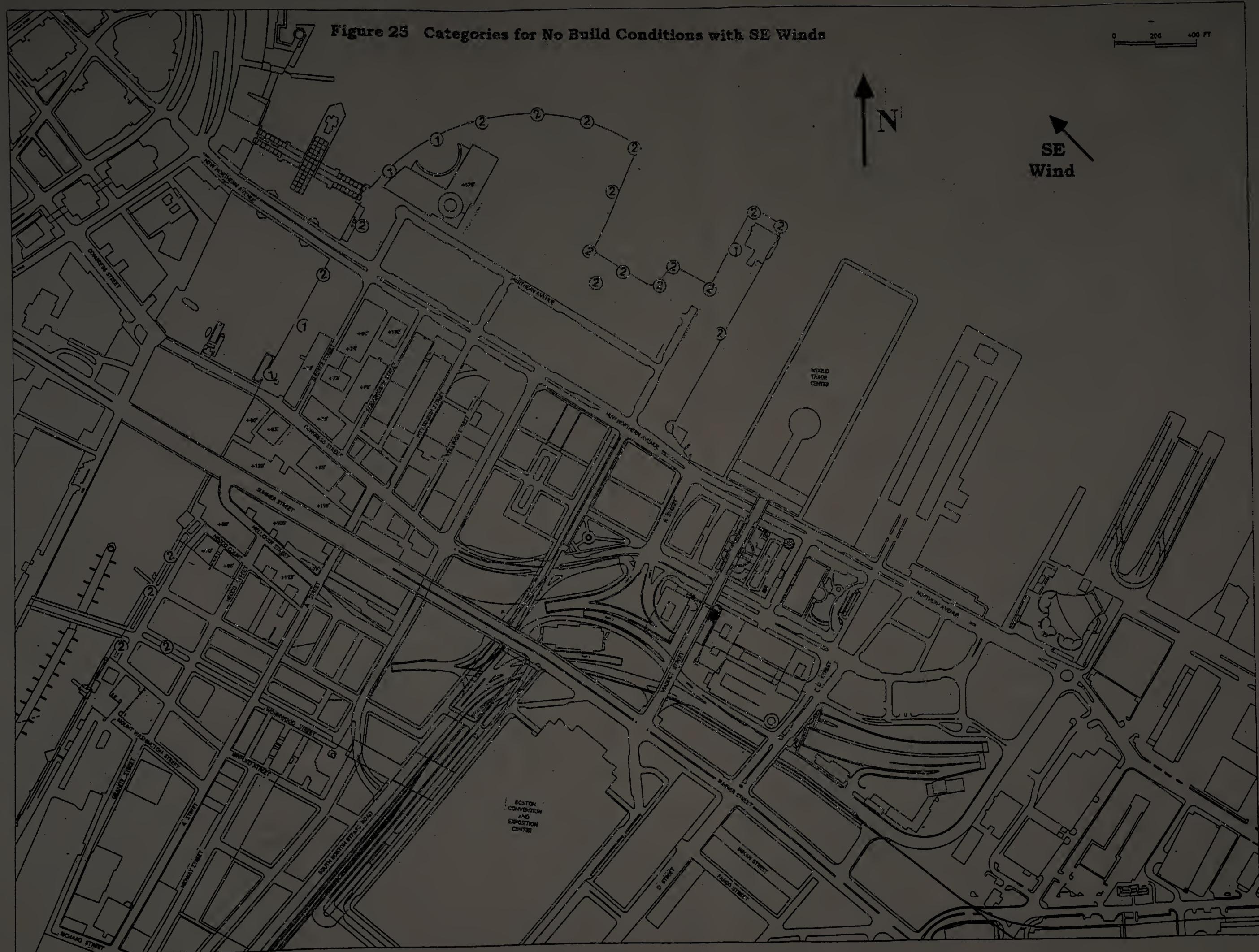


Figure 26

Figure 26 Categories for Representative Chapter 91 Build Conditions with SE Winds

Chapter 91 Height Diagram.

0 200 400 FT

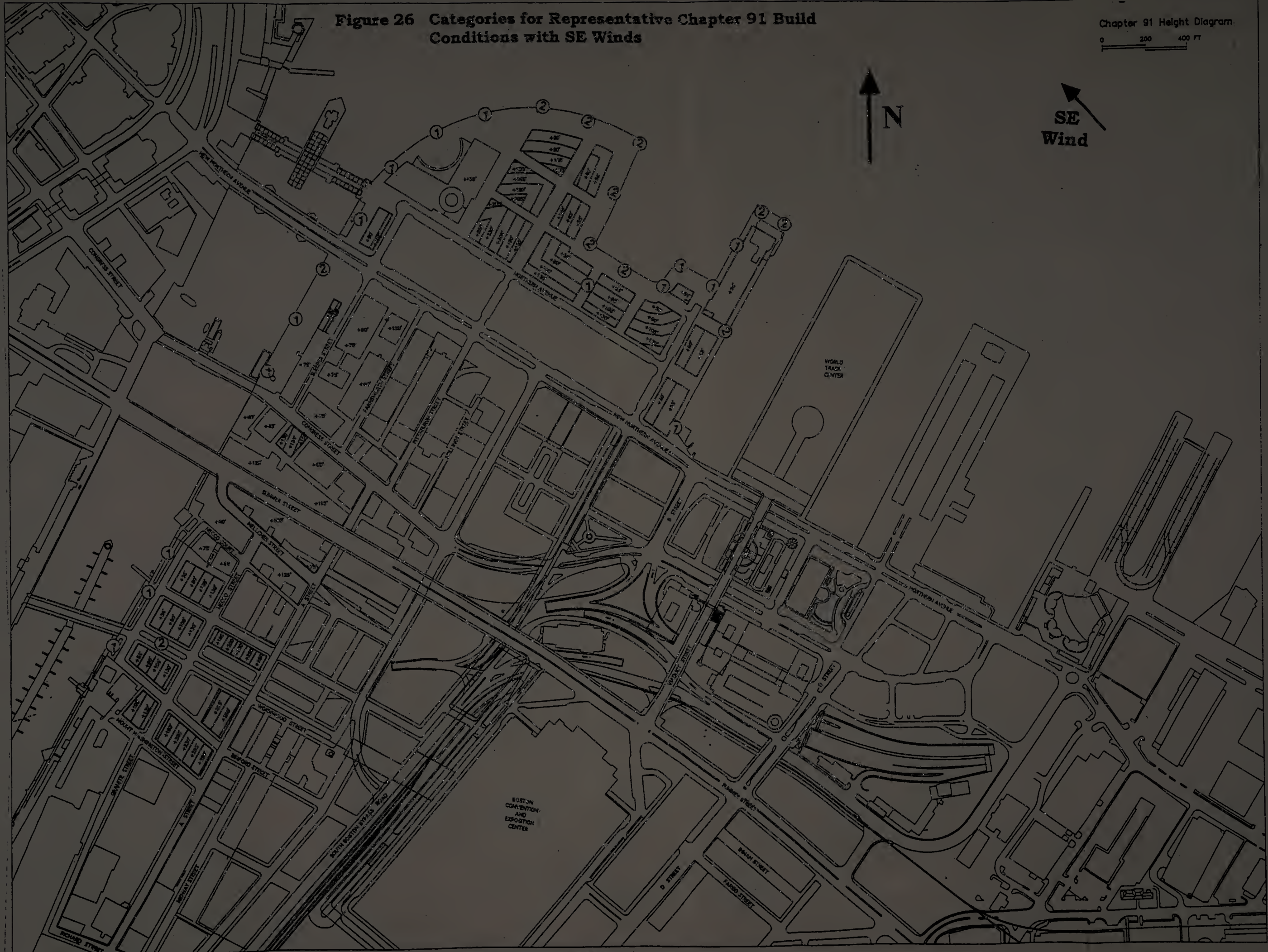


Figure 27 Categories for Representative Municipal Harbor Plan
Build Conditions with SE Winds

MHP Height Diagram
0 200 400 FT

Figure 27



Appendix 5:

The Fund for Parks and Recreation in Boston

CITY OF BOSTON
IN CITY COUNCIL

ORDERED: That funds contributed to the "Fund for Parks and Recreation in Boston" may be expended in accordance with the terms of the trust agreement attached hereto.

In City Council February 9, 1983. Passed.

Approved by the Mayor February 17, 1983.

Attest:



City Clerk

THE FUND FOR PARKS AND RECREATION IN BOSTON

KNOW ALL MEN BY THESE PRESENTS that the Collector-Treasurer of the City of Boston, hereinafter referred to as "Trustee", acknowledges that he has received on behalf of the Parks and Recreation Department of the City of Boston and pursuant to G.L. c. 44, s. 53A, the sum of One Dollar (\$1.00) from a donor; whose name, together with the names of all other donors to this trust and the amounts contributed by each, shall be kept by the Trustee in a permanent record, and agrees and declares for himself, that he shall hold said sum and all other gifts made to him as Trustee, hereunder, whether by gift inter vivos, by bequest, devise or otherwise, for the uses and purposes, and subject to the duties and powers herein set forth.

ARTICLE I

NAME AND PURPOSE

Section 1.1 Name

This trust shall be designated and known as "The Fund for Parks and Recreation in Boston."

Section 1.2 Purpose

This trust is established for the purpose of furthering the maintenance and preservation of parks now or in the future belonging to the City of Boston and providing recreational facilities and programs to the residents of Boston, and in this connection to seek, acquire and hold by gift, devise, purchase or otherwise, any type of property, real or personal, in such manner as the Trustee shall deem best suited to carry out the foregoing purposes; provided, however, that all trust property, both principal and income, shall be expended only with regard to parks now or in the future belonging to the City of Boston and recreational facilities and programs provided to the residents of Boston, and that no part of the trust property or the earnings thereof shall inure to the benefit of any private individual nor shall this trust take part in any political campaign on behalf of any candidate for public office.

ARTICLE II

ACCEPTANCE, DISTRIBUTION AND USE OF PRINCIPAL AND INCOME

Section 2.1 Acceptance

Gifts shall become trust property upon acceptance by the Managing Committee.

Section 2.2 Distribution

All distributions, payments and conveyances, both of principal and of income shall be made exclusively by the Trustee as provided for in Sections 3.2 and 3.3 hereof.

Section 2.3 Purposes

Except as provided in Section 2.4 hereof, the net income, together with so much of the principal as the Chairman shall determine, shall be used to maintain and preserve parks belonging to the City of Boston and to provide recreational programs to the residents of Boston; the net income, together with so much of the principal as the Chairman shall determine, shall be used to provide recreational facilities when the donor has so expressed the desire.

Section 2.4 Special Gifts

Where the donor has expressed the desire that the principal be kept intact and only the income or part thereof be used, if such a gift is accepted, the Chairman and Trustee shall respect such expressed desire.

ARTICLE III
THE MANAGING COMMITTEE

Section 3.1 Composition Of The Committee

The Managing Committee to determine distributions, payments and conveyances of gifts to which are attached no special requests or restrictions, shall consist of three members who shall serve without compensation. The Managing Committee shall consist of the following persons, each of whom shall hold office until the appointment and qualification of his successor:

1. Commissioner of Parks and Recreation,
 ex officio (Chairman)
2. Collector-Treasurer, ex officio
3. A Member of the City Council or designee of the
 City Council

Section 3.2 General Gifts

All distributions, payments and conveyances of gifts to which are attached no special requests or restrictions shall be made by the Trustee only upon written approval signed by two (2) members of the Managing Committee stating that such approval shall constitute full and complete authority to the Trustee for the making of the distributions, payments and conveyances therein called for.

Section 3.3 Special Gifts

All distributions, payments and conveyances of gifts to which are attached special requests or restrictions shall be made by the Trustee only upon written approval signed by the Chairman stating that such approval shall constitute full and complete authority to the Trustee for the making of the distributions, payments and conveyances therein called for.

ARTICLE IV

POWERS OF THE TRUSTEE

Section 4.1 General

Subject to Section 2.2 hereof, the Trustee shall have the exclusive management and control of the property of this trust and shall at all times have full power and authority to invest and reinvest, to manage, hold, and dispose of the trust property for the purpose of preserving or enhancing the trust property, with all the rights and privileges pertaining to trust management which are granted to a trustee by the law of the Commonwealth of Massachusetts unless otherwise restricted by the donor.

Section 4.2 Particular Powers

Without in any way limiting the generality of the foregoing, the Trustee shall also have the following powers and authority:

(a) To sell, exchange, transfer or convey any of the trust property upon such terms and conditions, and in such manner and form as he shall deem best, and to execute, acknowledge, deliver and record any deed, contract or other instrument relating to the trust property which he may deem necessary or advisable.

(b) To lease any real estate at any time held as a part of the trust property for such term or terms as the Trustee shall determine and upon such provisions and conditions as he shall determine.

(c) To mortgage any real estate at any time held as a part of the trust property to such extent and upon such terms and conditions as he shall determine.

(d) To determine to what extent money and other property coming into his possession, in order to do justice and equity, shall be deemed principal or income, and to apportion the same between principal and income to the extent he determines.

(e) To determine the mode in which expenses incidental to the administration of the trust shall be borne as between principal and income, and to apportion the same between principal and income.

(f) To establish and maintain in such manner and to such extent as he deems necessary or proper a sinking fund or sinking funds for the payment or reduction of any mortgage upon any real estate held by him hereunder.

(g) To amortize any premium on any bonds held as a part of the trust property or to refrain from doing so as he shall determine.

(h) To retain and hold any stock, bond or other security, any real estate or any other form of property given to him for as long a period as he deems advisable subject to limitations imposed upon the gift.

(i) To join in any merger, consolidation or reorganization of any corporation or association whose securities shall be held as part of the trust property; to pay any calls and assessments imposed upon the owner of such securities as a condition of participating therein; and to consent to any contract, lease, mortgage, purchase or sale of property, by or between such corporation and any other corporation or person.

(j) To deposit any security with any protective or reorganization committee and to delegate to such committee such power and authority with relation thereto as the Trustee may deem proper, and to agree to pay, and to pay, out of the property of this trust, such portion of the expenses and compensation of such committee as he may deem proper.

(k) To vote all stock and to execute and deliver proxies or powers of attorney to such person or persons as the Trustee may deem proper, granting to such person or persons such power and authority with relation to any property or securities at any time held as a part of the trust property as the Trustee deem proper.

(l) To exercise all powers and rights of subscription or otherwise which in any manner arise out of ownership of securities held as part of the trust property.

(m) To extend the time of payment of any obligation.

(n) To compromise, arbitrate or otherwise adjust claims in favor of or against the trust, including claims for taxes, and to accept any property, either in total or partial satisfaction of any indebtedness or other obligation and, subject to the provisions hereof,

to continue to hold the same for such period of time as the Trustee may deem appropriate.

(o) To grant such terms of credit as he may deem proper, with or without security, upon the occasion of making any sale or disposition of any asset contained in this trust and to give and receive money in order to effect equality in price upon the occasion of making any exchange.

Section 4.3 Limitations Upon Powers

The powers of the Trustee as set forth in Sections 4.1 and 4.2 hereof shall be limited as follows:

- (a) At least Five Thousand Dollars (\$5,000.00) worth of trust property shall be subject to distribution upon twenty-four (24) hours notice in accordance with Section 3 hereof.
- (b) Except for investment purposes, the trust property shall be kept separate from all other trust property of the City or a subdivision thereof. -
- (c) The Trustee may sell or lease any land or building which has become trust property as provided for in Section 2.1 hereof only upon

• three (3) weeks prior notice to the Boston City Council of the intent to sell or lease such land or building, together with a written statement of when and where written details of such proposed lease or sale may be examined; and after the aforementioned notice and statement has been advertised in the City Record once a week for three (3) successive weeks.

ARTICLE V

ACCOUNTS

The Trustee shall submit an annual account of the Trust to the Division of Public Charities of the office of the Attorney General of the Commonwealth of Massachusetts, the City Council or to such other office of said Commonwealth as shall be authorized to receive accounts of public charities. Said account shall be the result of an independent audit. The Trustee or the Chairman shall submit to the City Council a quarterly account of all gifts received by the Fund and all distributions, payments and conveyances thereof.

ARTICLE VI

DISSOLUTION

The City Council shall annually review the operations of the trust to determine whether the trust should be dissolved. Said dissolution shall require a two-thirds vote of the City Council. Upon dissolution of the Fund, the Managing Committee and Trustee shall take all steps necessary to assure the continued administration of the assets of the Fund for charitable purposes similar to that set forth in 1.2 hereof.

ARTICLE VII

MISCELLANEOUS

Section 7.1 Titles and Subtitles

Titles of the articles and titles and subtitles of the sections are placed herein for reference only, and in case of any conflict, the text of this instrument, other than such titles or subtitles, shall be controlling.

Section 7.2 Governed by Massachusetts Law

This trust shall at all times be governed, construed and administered in accordance with the laws of the Commonwealth of Massachusetts. Specifically,

nothing herein contained shall be read as abrogating the provisions of Article XLIX of the Massachusetts Constitution.

Section 7.3 Counterpart Copies

This Declaration of Trust may be printed and executed in as many counterparts as deemed desirable, each of which shall be an original and entitled to record. At least one copy shall always be kept on file and open to public inspection in the office of the Boston City Clerk.

Section 7.4 Recording

One executed copy shall be recorded in the office of the Boston City Clerk, the Division of Public Charities of the Office of the Attorney General of the Commonwealth of Massachusetts and the Office of the Secretary of the Commonwealth of Massachusetts. Any amendment shall take effect only when so recorded.

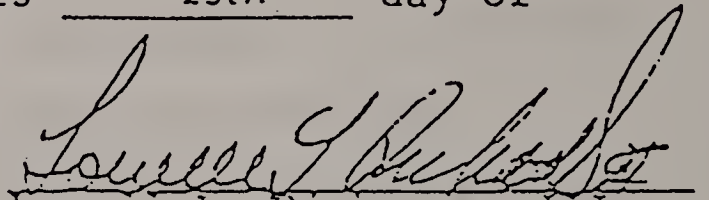
ARTICLE VIII

AMENDMENTS

This Trust may be amended at any time by the Chairman and a majority of the City Council; provided, however, no change made pursuant to

this Section shall change in any way the purposes of this Trust as set forth in Sections 1.2 and 2.3 hereof as to any property of the trust acquired prior to the change. Any amendment made pursuant to this Section shall be attached to each original counterpart of this instrument and shall be recorded as provided in Section 7.4 hereof.

In witness whereof, this Agreement and Declaration of Trust was executed this 25th day of February, 1983.


Lowell L. Richards, III

Witness Linda Altieri

Address 21 Belvidere St. Dorchester Mass

Witness Nancy Raymond

Address 175 West 74th St. S. Boston Mass

Appendix 6:

Boston Zoning Code Article 27P - South Boston Waterfront Interim Planning Overlay District

**Appendix 6: Boston Zoning Code Article 27P - South Boston
Waterfront Interim Planning Overlay District**

Text Amendment Application No. 288
Boston Redevelopment Authority
South Boston Waterfront
Interim Planning Overlay District

TEXT AMENDMENT NO. 259

***Effective:
July 22, 1999**

THE COMMONWEALTH OF MASSACHUSETTS

CITY OF BOSTON

IN ZONING COMMISSION

The Zoning Commission of the City of Boston, acting under Chapter 665 of the Acts of 1956 as amended, after due report, notice and hearing, does hereby amend the Boston Zoning Code as follows:

By inserting, after Article 27N, the following article:

ARTICLE 27P

**SOUTH BOSTON WATERFRONT
INTERIM PLANNING OVERLAY DISTRICT**

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	27P-3	Definitions 4
	27P-4	Physical Boundaries 5
	27P-5	Applicability 5
	27P-6	Zoning Regulations in Effect; Conflict Provisions 6
	27P-7	General Land Use Objectives for the Subdistricts 7
	27P-8	Convention Center Special Study Area 9

*Date of public notice: March 2, 1998 (see St. 1956, c. 665, s. 5)

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Appendix A	South Boston Waterfront IPOD Study Area
Appendix B	Interim Height and FAR Controls: <ul style="list-style-type: none"> - Height and Floor Area Ratio (FAR) Areas (Map) - Interim Heights and Floor Area Ratios (Table)
Appendix C	Convention Center Buffer Zone Subdistrict: Forbidden Uses
Appendix D	Water-Dependent Uses

SECTION 27P-1. Statement of Purpose. The purposes of this Article are to facilitate rezoning of the waterfronts of South Boston and the Fort Point Channel and, in particular, to:

- Establish interim use regulations that are appropriate to the character and resources of each subdistrict and compatible with adjacent residential areas;
- Ensure that neighborhood residents share in the benefits of the district's revitalization;
- Encourage the creation of market rate and affordable housing opportunities for the community;
- Establish interim height and FAR limits to ensure that new development is appropriate to the Boston skyline, the public realm, and the adjacent residential neighborhoods;
- Provide physical connections between Boston Harbor and its surrounding neighborhoods;
- Establish guidelines for the creation of streets, open spaces, and other elements of the public realm;
- Promote an appropriate density and mix of uses to create a 24-hour community and to protect residential areas from incompatible uses;
- Establish urban design and architectural guidelines within the South Boston Waterfront that reflect the character of each of its distinctive areas and promote visual and physical access to the waterfront, while allowing a contemporary mixed-use economy to flourish;
- Manage the traffic flow system to ensure that the new roadway and public transit projects, along with new economic growth, will not result in adverse impacts on the residential neighborhoods;
- Extend the Harborwalk along the water's edge to provide public access and serve as the principal public framework for organizing the district's open space;
- Protect and create significant view corridors to the Harbor and to important features of the district;
- Preserve and protect public open spaces within the Waterfront area;

- Promote the development of public waterborne transportation; and
- Protect the working waterfront and preserve areas for water-dependent and water-related industrial and commercial uses.

SECTION 27P-2. Declaration of Need for Interim Zoning. Interim zoning in the South Boston Waterfront Interim Planning Overlay District is necessary to provide the proper balance between competing land uses and economic and environmental factors. Characteristics of existing zoning that render it inappropriate include its failure to: provide for opportunities for appropriately sited mixed-use development that is beneficial to the community; discourage the siting of industrial and entertainment uses where they may be incompatible with residential communities; regulate building location, height, and density so as to preserve and enhance view corridors to the water; provide a balance between new development and the need for open space and public access to the waterfront; provide guidelines for the development of the public realm; provide height and density controls and design guidelines that encourage the preservation of historic structures and maintain the character of the historic areas of the district.

SECTION 27P-3. Definitions. Words and phrases not otherwise defined in this Article have the meanings set forth in Article 2A (Definitions Applicable in Neighborhood Districts and in Article 80). For the purposes of this Article only, the following words or phrases have the meanings indicated:

1. "Convention Center" means the Boston Convention Center and Exhibition Center described in Chapter 152 of the Acts of 1997.
2. "Interim Planning Permit" means a permit granted pursuant to Section 27-3 for a Proposed Project subject to the provisions of this Article.
3. "South Boston Waterfront IPOD" means the regulations imposed by this Article.
4. "South Boston Waterfront IPOD Study Area" means the area defined in Section 27P-4 (Physical Boundaries).
5. "South Boston Waterfront Master Plan Interim Report" means the report issued by the Boston Redevelopment Authority under the title: "The South Boston Seaport: A Master Plan for the Fort Point and South Boston Waterfront -- Interim Report," dated December 1997.

6. "South Boston Waterfront Committee" means the advisory committee appointed by the Mayor of Boston to advise the Boston Redevelopment Authority on planning and development matters pertaining to the South Boston waterfront.
7. "Water-Dependent Use" means any use listed as such in Appendix D (Water-Dependent Uses) to this Article.

SECTION 27P-4. Physical Boundaries. This Article shall be applicable only in the South Boston Waterfront IPOD Study Area, which consists of the area depicted on Appendix A to this Article. The South Boston Waterfront IPOD Study Area is divided into subdistricts, which may be divided further into study areas. These subdistricts also are depicted on Appendix A.

SECTION 27P-5. Applicability. Any Proposed Project within the South Boston Waterfront IPOD Study Area shall be subject to the provisions of this Article except as otherwise specified in this Section 27P-5.

1. Applicability Within Saint Vincent Neighborhood District. A portion of the South Boston Waterfront IPOD Study Area covers a portion of the Saint Vincent Neighborhood District (Article 57). The provisions of Sections 27P-9 (Interim Height and FAR Controls), 27P-10 (Interim Use Controls), 27P-11 (Interim Waterfront Yard Area Requirements), 27P-12 (Interim Open Space Requirements), 27P-13 (Interim Parking Controls), 27P-14 (Development Review and Design Guidelines), and 27P-16 (Planned Development Areas) shall not apply to any Proposed Project in the South Boston Waterfront IPOD Study Area that is located within the boundaries of the Saint Vincent Neighborhood District. All other provisions of this Article, including the requirements of Sections 27P-18 and 27P-19, concerning Interim Planning Permits, shall apply to any such Proposed Project.
2. Exempt Projects. The following Proposed Projects are exempt from the provisions of this Article:
 - (a) Any Proposed Project for which application to the Inspectional Services Department for a building or use permit has been made prior to the first notice of hearing before the Zoning Commission for adoption of this Article and for which no Zoning Relief is required.
 - (b) Any Proposed Project for which appeal to the Board of Appeal for any Zoning Relief has been made prior to the first notice of

hearing before the Zoning Commission for adoption of this Article, provided that such Zoning Relief thereafter is granted by the Board of Appeal pursuant to such appeal.

SECTION 27P-6. Zoning Regulations in Effect; Conflict Provisions. The South Boston Waterfront IPOD and Underlying Zoning together constitute the zoning regulations for the South Boston Waterfront IPOD Study Area. Where conflicts exist between the provisions of the South Boston Waterfront IPOD and those of the Underlying Zoning, the provisions of this Section 27P-6 shall govern. Upon the expiration of this Article, the Underlying Zoning shall constitute the sole set of zoning regulations for the South Boston Waterfront IPOD Study Area.

1. Effect of South Boston Waterfront IPOD on Other IPODs.
 - (a) South Boston Seaport Buffer Zone IPOD. The South Boston Waterfront IPOD Study Area covers the South Boston Seaport Buffer Zone IPOD Study Area (Article 27N) in its entirety. Except as provided in Section 27P-5.2 (Exempt Projects), application of the provisions of Article 27N to the South Boston Waterfront IPOD Study Area is rescinded, and the South Boston Seaport Buffer Zone IPOD is extinguished on the effective date of this Article.
2. Conflicts: General Rule. Where conflicts exist between the provisions of the South Boston Waterfront IPOD and Underlying Zoning, the provisions of the South Boston Waterfront IPOD shall govern, except as provided in subsection 3 of this Section 27P-6.
3. Amendments to Underlying Zoning. Any duly enacted amendment to the Underlying Zoning pertaining to land use in the South Boston Waterfront IPOD Study Area shall govern, provided notice of a public hearing before the Zoning Commission is published after the effective date of this Article. Notwithstanding any other provision of this Article, any such amendment may occur prior to the expiration of this Article and may relate to any area for which a planning and rezoning study has been completed by the Boston Redevelopment Authority.

For purposes of this Section 27P-6 only, "Underlying Zoning" means all zoning regulations, with the exception of this Article, that are contained in this Code and accompanying zoning maps.

SECTION 27P-7. General Land Use Objectives for the Subdistricts. The general land use objectives for the subdistricts of the South Boston Waterfront IPOD are as follows:

1. Industrial South Boston Subdistrict. This area is important as a location for industries that support the maritime activities of the industrial port, as well as general industrial uses, such as manufacturing, assembly, and warehousing. The area's many activities provide a source of jobs for Boston residents that add to the diversity of the City's economy. At the southern edge of this industrial area lies the Saint Vincent residential neighborhood. Planning and rezoning shall protect and buffer this residential area while providing for appropriate industrial and port-related uses.
2. Enhancement Zone Subdistrict. This subdistrict comprises the area bounded by the Convention Center Special Study Area along Cypher Street and D Street, the Saint Vincent Neighborhood District to the south, and the Industrial South Boston Subdistrict to the east and north. Planning and rezoning shall provide for appropriate buffering between the residential community and the adjacent future convention center.
3. South Boston Inner Harbor Subdistrict. The South Boston Inner Harbor has evolved through various stages since the marshes and bays were filled. Properties that were once thriving piers, wharves and railheads became abandoned and re-used for open parking lots. Some of these properties already are being redeveloped for new economic uses in this subdistrict. Much of the impetus for development comes from the area's proximity to the financial district and downtown waterfront activities, from the improved access to the interstate highway system, airport and public transit created by new transportation infrastructure, and from its position between the future convention center and the waterfront.

A portion of the South Boston Inner Harbor Subdistrict covers the area for which new zoning was adopted in 1991 as the Fort Point Waterfront of the Harborpark District (Article 42E). Because the planning and development context for this area has changed significantly since Article 42E was adopted, planning and rezoning is needed to ensure that the development of this area complements the development of the South Boston Waterfront as a whole.

Planning and rezoning for the South Boston Inner Harbor Subdistrict shall provide for a mixed-use area, with uses that will encourage activity both day and evening. Because this subdistrict lies

between the Fort Point Waterfront Subdistrict and the Harbor, planning and rezoning also shall provide for the development of the street grid to extend the street pattern of Fort Point's historic areas to the water's edge.

4. Fort Point Waterfront Subdistrict. The Fort Point Waterfront is an unusual urban enclave where small businesses, residences and artists' studios, light manufacturing concerns, and offices coexist in a now seldom-seen blend of urban activity. This subdistrict is characterized by its large, ornamental brick warehouses constructed in the late 19th and early 20th centuries, which have been refurbished over time and now house an eclectic mix of uses. Planning and rezoning shall promote the preservation of the scale and character of this subdistrict.
5. Industrial Fort Point Subdistrict. The Industrial Fort Point Subdistrict comprises the site of the manufacturing operations of the Gillette Company, employing some 5,000 workers and occupying more than a million square feet of space. It is well-served by the new South Boston Haul Road, a truck route that bypasses local streets. This subdistrict is fairly well built out at the present time. Planning and rezoning shall provide for building heights and related regulations to accommodate industrial uses while providing for public access to the Fort Point Channel and connections to adjacent subdistricts.
6. Fort Point Channel Subdistrict. The South Boston Waterfront enjoys direct access to Fort Point Channel. This water body presents many opportunities for the activation of the water sheet as part of a lively and complex public realm. The Channel is divided into four basins defined by the bridges that cross this water body, each with its own distinctive character. *Basin A* includes the area between the inner harbor and the Evelyn Moakley Bridge. Because of its location at the mouth of the Channel, and its proximity to commuter destinations in downtown and the Waterfront, this basin should be devoted to public uses, such as commuter and excursion vessel docking and water taxis. *Basin B*, between the Evelyn Moakley Bridge and the Congress Street Bridge, has experienced the most significant water sheet development and is the location of major cultural and tourist uses, including the Tea Party Ship, the Children's Museum, and the Computer Museum. *Basin C* (between Congress and Summer Street) is small and constrained by a number of structures making navigation difficult. *Basin D* (between Summer Street and the Dorchester Avenue Bridge) is a calm and controlled water body, and future uses should be those that require a no-wake condition. Basins C and D are not well-suited to large marina development.

Planning and zoning for the Fort Point Channel Subdistrict shall provide for uses appropriate to the conditions of each basin.

7. Commercial Fort Point Subdistrict. This subdistrict covers a long narrow strip along the edge of the Financial District running the length of the Fort Point Channel, from the Old Northern Avenue Bridge southward. It has an eclectic mix of uses and architectural elements that give this area a distinctive character. The Commercial Fort Point Subdistrict is connected to the rest of the South Boston Waterfront via several bridges that span Fort Point Channel. Planning and rezoning shall address this subdistrict's critical role in connecting the downtown to the Waterfront.
8. Industrial Port/Fish Pier Subdistrict. This subdistrict lies between industrial port and the Inner Harbor Subdistrict, facing both Northern Avenue and the water. Planning and rezoning for this subdistrict shall consider its important location at the center of the Waterfront where the operations of maritime business and service sector uses come together.

SECTION 27P-8. Convention Center Special Study Area. This Section 27P-8 establishes the Convention Center Special Study Area, bounded generally by the Haul Road, Summer Street, D Street and Cypher Street and depicted on Appendix A to this Article. This Special Study Area shall not be subject to the interim use, dimensional, or parking controls, or interim planning permit requirements, of this Article. Land use and development decisions for this Special Study Area will be made in accordance with the Boston Convention & Exhibition Center Development Plan adopted by the Boston City Council on March 11, 1998 and development review by the Boston Redevelopment Authority pursuant to Article 80.

SECTION 27P-9. Interim Height and FAR Controls. Proposed Projects within the South Boston Waterfront IPOD Study Area are governed by the interim height and FAR controls set forth in Appendix B to this Article.

SECTION 27P-10. Interim Use Controls. All uses forbidden by the Underlying Zoning are forbidden uses in the South Boston Waterfront IPOD Study Area. In addition, within the Enhancement Zone Subdistrict, any use listed in Appendix C to this Article is a forbidden use within the study area specified.

SECTION 27P-11. Interim Waterfront Yard Area Requirements. Except as otherwise expressly provided in this Article, the Waterfront Yard Area requirements of this Section 27P-11 apply to any Lot in the South Boston Waterfront IPOD Study Area that: (a) is located on Tidelands subject to M.G.L. Chapter 91 (Waterways), or (b) is adjacent to, or includes, the High Tide Line.

Any Lot to which this Section 27-11 applies shall include a Waterfront Yard Area adjacent to and landward of the High Tide Line, excluding portions of the High Tide Line occupied by Piers. A Waterfront Yard Area also shall be required along the edges of any Pier. The required Waterfront Yard Area landward of the High Tide Line and the required Waterfront Yard Area on Piers shall be connected so as to provide a continuous path along the waterfront, with a minimum width at the places of connection of no less than twelve (12) feet. The dimensions of the required Waterfront Yard Areas shall be as set forth in Table 1, below, unless the Boston Redevelopment Authority determines, pursuant to the Urban Design Component of Large Project Review or, if Large Project Review does not apply, pursuant to the Design Component of Small Project Review, that a setback of less than fifty feet is necessary to accommodate existing buildings or other conditions on the Lot and will provide adequately for a continuous path along the waterfront.

TABLE 1

Required Depth of Waterfront Yard Area

Required Setback (Shoreline, excluding Piers)	Required Setback (Sides of Piers)	Required Setback (Ends of Piers)
50'	12'	50'

The following additional provisions shall apply to the Waterfront Yard Area requirement:

1. Waterfront Yard Area Measurements. The depth of the Waterfront Yard Area shall be measured perpendicularly from the High Tide Line in the case of bulkheads, rip rap, fill, or shoreline and perpendicularly from the Ends and Sides of Piers. In locating the Waterfront Yard Area, the actual High Tide Line may be smoothed with such curves and chords as may be necessary to achieve a reasonably regular landward boundary. However, in no instance shall the Waterfront Yard Area be narrower than the required dimension measured perpendicularly from the actual High Tide Line.
2. Setback Requirements. No portion of any building or structure (including, without limitation, mechanical facilities associated with a building) shall be located in any Waterfront Yard Area, except walkways, landscape furniture, guardrails, cleats, bollards, pilings, boat ramps, and other

structures that do not materially interfere with pedestrian use of the Waterfront Yard Area or that are required for operational or safety reasons to be located at the water's edge, provided that any resulting interference with pedestrian use of the Waterfront Yard Area is minimized to the extent economically practicable.

3. Exception to Waterfront Yard Area Setback Requirement. Any building or structure used for a Water-Dependent Use, including, without limitation, drydocks, enclosed or covered wet dock sheds, davits, hoists, mast markers, and the structures listed in subsection 2 above, shall be permitted within the Waterfront Yard Area as necessary to avoid interference with any direct access to the water required for such Water-Dependent Use.
4. Floating Structures. No portion of any Waterfront Yard Area shall be located on any floating structure.

SECTION 27P-12. **Interim Open Space Requirements.** The Open Space requirements of this Section 27P-12 apply to any Proposed Project in the South Boston Waterfront IPOD Study Area involving new construction at grade, except a Proposed Project with a gross floor area of 2,500 square feet or less used exclusively for one or more Water-Dependent Uses.

Any Proposed Project to which the Open Space requirements of this Section 27P-12 apply shall devote to Open Space at least fifty percent (50%) of the Lot Area of such Proposed Project, unless the Boston Redevelopment Authority determines, pursuant to the Urban Design Component of Large Project Review or, if Large Project Review does not apply, pursuant to the Design Component of Small Project Review, that a smaller open space area, or the provision of Open Space in a different location, would result in a design more compatible to the surrounding area.

For the purposes of this Article, the term "Open Space" shall mean land areas and areas on Piers excluding: (a) any area occupied by a building or roofed structure; (b) any parking lot or parking area; (c) any street; (d) any private road or area devoted to motor vehicle use; (e) any salt-water area below the High Tide Line, other than areas on Piers; (f) any fresh water area more than ten (10) feet from the shoreline; (g) marina slips or floats or other floating structures; (h) swimming pools; and (i) tennis courts.

SECTION 27P-13. **Interim Parking Controls.** Within the South Boston Waterfront IPOD Study Area, the number of off-street parking spaces are required for dwelling units created after the effective date of this Article shall be determined through Large Project Review or, for Proposed Projects to which Large Project Review does not apply, through Small Project Review, pursuant to Article 80.

SECTION 27P-14. Development Review and Design Guidelines. The thresholds for Large Project Review within the Harborpark, as set forth in Section 80B-2.3, shall apply to Proposed Projects within the South Boston Waterfront IPOD Area.

The design guidelines set forth in the South Boston Waterfront Master Plan Interim Report, and any design guidelines prepared pursuant to such report, shall apply as design guidelines for the South Boston Waterfront IPOD Study Area.

SECTION 27P-15. Interim Chapter 91 Requirements. In accordance with Chapter 91 of the General Laws of Massachusetts ("Chapter 91") and the regulations promulgated thereunder, certain projects located in Tidelands (as defined in Chapter 91) require a license ("Chapter 91 License") from the Commonwealth's Department of Environmental Protection. Section 18 of Chapter 91 requires that the planning board of a municipality in which a Project requiring a Chapter 91 license is located (in Boston, the Boston Redevelopment Authority) submit a written recommendation ("Section 18 Recommendation") stating whether the planning board believes the Project would serve a proper public purpose and would not be detrimental to the public's rights in Tidelands (the "Section 18 Standard").

The Boston Redevelopment Authority shall make any Section 18 Recommendation with respect to a Project located in the South Boston Waterfront IPOD Study Area in accordance with the provisions of Subsection 1 of this Section 27P-15. For the purposes of this Section 27P-15 only, the term "Project" shall mean a development, activity, or change of use requiring a Chapter 91 license.

1. Determination of Proper Public Purpose. The Boston Redevelopment Authority, in making a Section 18 Recommendation regarding a Project located in the South Boston Waterfront IPOD Study Area, shall determine whether such Project serves a proper public purpose and would not be detrimental to the public's rights in Tidelands. The Boston Redevelopment Authority shall base such determination on the conformity of the Project to the provisions of Subsections 2 through 7 of this Section 27P-15 and on the extent to which the Project reasonably and appropriately preserves and enhances the public's rights in Tidelands including, without limitation, the public's:
 - (a) visual access to the water, whether such Project is for a Water-Dependent or non-Water-Dependent use on Private or Commonwealth Tidelands;

- (b) rights to fishing, fowling, and navigation and the natural derivatives thereof, if such Project is for a Water-Dependent Use or non-Water-Dependent Use on Private or Commonwealth Tidelands;
- (c) physical access to and along the water's edge for recreation, commerce, and other lawful purposes, and interest in public recreational opportunities at the water's edge and open space for public use and enjoyment, if such Project is for a Water-Dependent Use or non-Water-Dependent Use on Commonwealth Tidelands;
- (d) interest in the preservation of the historic character of the Project's site;
- (e) interest in industrial and commercial waterborne transportation of goods and persons;
- (f) interest in repair and rehabilitation of dilapidated piers that blight the South Boston Waterfront IPOD Study Area and limit public access; and
- (g) interest in safe and convenient navigation in Boston Harbor, including without limitation:
 - (i) navigation by water transportation Vessels, such as ferries, water taxis, water shuttles, or commuter vessels, including, without limitation, appropriate and convenient navigation by such Vessels outside of the Main Shipping Channel and other established channels;
 - (ii) navigation by deep draft Vessels, including without limitation, appropriate navigation in the Main Shipping Channel and other established channels and the requirements of turning, anchorage, and approaches to deep water piers and berths;
 - (iii) navigation by Recreational Vessels and small Commercial Vessels outside of the Main Shipping Channel and other established channels as necessary or convenient for such vessels to avoid interference with water transportation Vessels and deep draft shipping and as otherwise required for the purposes of harbor traffic management; and
 - (iv) navigation, as appropriate to the site, by U.S. Coast Guard, U.S. Naval, police, fire, and other public safety Vessels.

2. Public Access to the Waterfront and Open Space. Public access to the waterfront and Open Space is a central policy of the South Boston Waterfront IPOD and the South Boston Waterfront Master Plan Interim Report. Pursuant to this policy, the Boston Redevelopment Authority shall not make a positive Section 18 Recommendation with respect to a Project that the Boston Redevelopment Authority determines will significantly interfere with public rights to walk or otherwise pass freely on Commonwealth Tidelands for purposes of commerce, recreation, and all other lawful activities; or on Private Tidelands for purposes of fishing, fowling, navigation, and the natural derivatives thereof. The Boston Redevelopment Authority shall find that the Section 18 Standard is not met if the Project does not comply with the following public access conditions:
- (a) Pedestrian Access to Flowed Private Tidelands. To the extent that the Project site includes Flowed Private Tidelands, the Project shall allow continuous, on-foot, lateral passage by the public in the exercise of its rights therein, wherever feasible. Any Pier, wharf, groin, jetty, or other structure on such Tidelands shall be designed to minimize interference with public passage, either by maintaining at least a five-foot clearance above the ground along the high water mark, by providing a stairway for the public to pass laterally over such structures, or by other means of lateral access substantially consistent with the foregoing. Where obstruction of continuous access below the high water mark is unavoidable, the Project shall provide free lateral passage to the public above the high water mark in order to mitigate interference with the public's right to pass freely on Flowed Private Tidelands.
 - (b) Pedestrian Access to Commonwealth Tidelands and Filled Private Tidelands. To the extent that the Project site includes Flowed or Filled Commonwealth Tidelands, or Filled Private Tidelands, the Project shall include reasonable measures to provide on-foot passage on such lands for the public in the exercise of its rights therein, in accordance with the following provisions:
 - (i) If the Project is not a Water-Dependent Use Project, said Project shall provide a public Pedestrian Access Network.
 - (ii) If the Project is a Water-Dependent Use Project, the Project shall provide for public passage by such means as are consistent with the need to avoid undue interference with the Water-Dependent Use and to avoid any safety hazard to people working on or visiting the Project site. Appropriate measures

may include, but are not limited to, allowing the public to pass laterally along portions of the Project shoreline or transversely across the site to a point on the Project shoreline.

- (c) Accessibility, Maintenance, and Design of Open Space and Pedestrianways. All Open Space areas established pursuant to this Article located on Commonwealth Tidelands, and all public access facilities described in paragraphs (a) and (b) of this Subsection 2 ("Public Access Facilities") shall be open and accessible to the public twenty-four (24) hours a day. No gates, fences, or barriers may be placed on Public Access Facilities or Open Space in a manner that would impede or discourage the free flow of pedestrian movement thereon.

The requirements of this paragraph (c) do not prohibit the placing of temporary barriers as required in emergencies or in connection with construction, maintenance, or the like, provided that interference with pedestrian access and passage is minimized to the extent reasonably practicable and consistent with public safety and that such barriers are in place no longer than necessary.

All Public Access Facilities shall be Accessible to Physically Handicapped Persons. Active pedestrian use of Open Space areas and Public Access Facilities shall be encouraged on a year-round basis, particularly for water-related activities, through such means as appropriate ground level uses of adjacent buildings and facilities and amenities designed to be attractive to pedestrians. Maintaining, cleaning, landscaping, and managing Open Space areas and Pedestrian Access Facilities shall at all times be the responsibility of the Chapter 91 licensee of the Project.

- (d) Signage for Public Access Facilities. Any Project required to provide Public Access Facilities in accordance with paragraph (b), above, shall encourage public patronage of such facilities by placing and maintaining adequate signage at all entryways and at other appropriate locations on the site. Such signage shall be subject to design review by the Boston Redevelopment Authority, pursuant Small Project Review, unless such signage is reviewed under Large Project Review. The Boston Redevelopment Authority shall determine whether such signage is consistent with:

- (i) the design guidelines for Harborwalk signage set forth in the South Boston Waterfront Master Plan Interim Report

or in other guidelines issued pursuant to that report; and

- (ii) the requirements of Article 11 (Signs), provided that the BRA may allow such signage to conform to different requirements in order to achieve a design more appropriate to the Harborwalk or surrounding area.

3. Creation of Housing. The South Boston Waterfront Master Plan Interim Report envisions the creation of an active, 24-hour neighborhood. To this end, the goals of the Interim Report and the South Boston Waterfront IPOD include the achievement of an appropriate mix of uses in the South Boston Waterfront IPOD Study Area and the provision of housing that meets the needs of the Waterfront and surrounding residential communities. Accordingly, in determining whether the Section 18 Standard is met, the Boston Redevelopment Authority shall consider the extent to which a Project: (a) contributes to an appropriate mix of residential and nonresidential uses in the South Boston Waterfront IPOD Study Area as a whole; and (b) creates, or causes the creation of, dwelling units in the South Boston Waterfront IPOD Study Area or surrounding residential communities that are affordable to residents of the area in which such dwelling units are created.

4. Provision for Water Transportation Facilities. To promote an effective water transportation system and to ensure use of the waterfront and full access to recreational, commuting, and economic activities, the Boston Redevelopment Authority shall find that the Section 18 Standard is not met unless the Project conforms to the applicable requirements for water transportation facilities set forth below:

(a) Water Transportation Facility Requirement. In making a Section 18 Recommendation with respect to a Project, the Boston Redevelopment Authority shall consider the extent to which provision is made on the Project site for waterborne passenger transportation facilities, including, without limitation, terminals and landings for water ferries, water shuttles, or water taxis, and free public landings, as appropriate to the use, scale, and location of the Project, and in accordance with the water transportation guidelines set forth in, or issued pursuant to, the South Boston Waterfront Master Plan Interim Report.

(b) Provision of Dockage at Seawalls and Bulkheads. In order to provide adequate docking areas for both emergency use and routine harbor activities, any reconstruction of seawalls or bulkheads along those

portions of the Project shoreline that abut waters accessible by Vessels shall, to the extent reasonably practicable, accommodate dockage of Vessels alongside such seawalls or bulkheads.

5. Additional Regulations Applicable to Tidelands Proposed to be Filled. This Subsection 5 governs Tidelands that are filled after the date of the first notice of hearing before the Zoning Commission on this Article ("new fill"). Piles are not considered "fill" for the purpose of this Article.

- New fill is prohibited in any area where Pier construction or extension is prohibited by this Code.

No portion of a Project located on Tidelands that are subject to the provisions of this Subsection 5 shall be erected, used, or arranged or designed to be used except for a Water-Dependent Use that is not forbidden for such location in the South Boston Waterfront IPOD Study Area, except as otherwise provided in this Subsection 5.

In making a Section 18 Recommendation with respect to a Project involving new fill, the Boston Redevelopment Authority shall find that the Section 18 Standard is not met unless such new fill is limited to the extent reasonably practicable by measures such as substituting pile-supported or floating structures for new fill or relocating the use to a position above the High Tide Line.

This Subsection 5 does not prohibit or limit the use of new fill the purpose of which is to eliminate irregularities in or repair previously altered portions of the shoreline included in the Project, provided that such new fill replaces previously authorized fill elsewhere along such shoreline on a one-to-one square foot basis (new fill to removed fill). This Subsection 5 also does not prohibit or limit the use of new fill the purpose of which is to accommodate mechanical or structural elements of the Project that enter the seabed, such as, without limitation, elevator shafts, ventilation shafts, utility conduits, piles, or the like, provided that such fill is limited to that reasonably required under the circumstances and provided, further, that all such mechanical elements, structural elements, and fill are wholly contained within the edges of a Pier.

6. Uses Allowed on Floating Structures. No floating Structure, other than a Vessel, shall be used or arranged or designed to be used except for a Water-Dependent Use not forbidden for such location in the South Boston Waterfront IPOD Study Area.

7. Regulations Governing Piers. No portion of any Pier to which this Article applies shall be erected, used, or arranged or designed to be used except as publicly accessible Open Space or for a Water-Dependent Use not forbidden for such location in the South Boston Waterfront IPOD Study Area.

SECTION 27P-16. Planned Development Areas. No Planned Development Area (PDA) shall be established within the South Boston Waterfront IPOD Study Area except in conformity with this Section 27P-16.

1. Location of Planned Development Areas. Within the South Boston Waterfront IPOD Study Area, Planned Development Areas may be established only within the South Boston Inner Harbor Subdistrict and within that area of the Industrial South Boston Subdistrict bounded by Summer Street, D Street, the extension of the Haul Road, and Pumphouse Road.
2. Planned Development Areas: Public Benefit Criteria. The Boston Redevelopment Authority may approve a PDA development plan as meeting the requirement of Section 80C-4 (Standards for PDA Review Approval) for compliance with the applicable planning and development criteria of this Article only if the development plan proposes a plan for public benefits, consistent with goals of the South Boston Waterfront Master Plan Interim Report, including one or more of the following: (a) the expansion of the waterfront economy, including the creation of new permanent jobs or the retention of jobs that otherwise would be lost; (b) the creation of new community housing opportunities; (c) the enhancement or support of community facilities or programs; or (d) the enhancement of the public realm, including the provision or substantial improvement of waterfront public facilities and the Harborwalk, the provision of accessible public open space, or the activation of the water sheet.
3. Conformity with Plans for Area. The Boston Redevelopment Authority may approve a PDA development plan as meeting the requirement of Section 80C-4 (Standards for PDA Review Approval) that the development plan conform to the plan for the geographic area where the PDA is located only if the development plan conforms generally to the provisions of the Waterfront District in South Boston Master Plan and to any provisions of the City's Municipal Harbor Plan that relate to land within the Waterfront District in South Boston IPOD Study Area. For the purposes of this Section 27P-16, the term "Municipal Harbor Plan" refers to any plan approved by the Commonwealth before or after the effective date of this article under

the provisions of 301 CMR 23.00 (Review and Approval of Municipal Harbor Plans).

SECTION 27P-17. South Boston Waterfront Master Plan. During the interim planning period, a South Boston Waterfront Master Plan shall be developed by the Boston Redevelopment Authority to guide future development. The provisions of the South Boston Waterfront Master Plan shall include, but need not be limited to, standards addressing uses, including uses of the water sheet; heights and other building dimensions; open space and Harborwalk setbacks; parking; and design guidelines.

SECTION 27P-18. Standards for Issuance of Interim Planning Permit. The Board of Appeal shall grant an Interim Planning Permit for a Proposed Project only if it finds that: (a) the benefits to the community outweigh the burdens imposed; and (b) the Proposed Project is in substantial accord with the applicable provisions of this Article. If the Boston Redevelopment Authority has made a recommendation to the Board of Appeal on the issuance of an interim planning permit, the Board of Appeal shall follow such recommendation unless specific, written reasons for not doing so are incorporated in the Board of Appeal's decision.

SECTION 27P-19. Enforcement. The Commissioner of Inspectional Services shall not issue a building, demolition, or use permit for any Proposed Project subject to the provisions of this Article unless the Board of Appeal has approved an Interim Planning Permit for the Proposed Project in accordance with Section 27-3 (Interim Planning Procedure) and Section 27P-18 (Standards for Issuance of Interim Planning Permit).

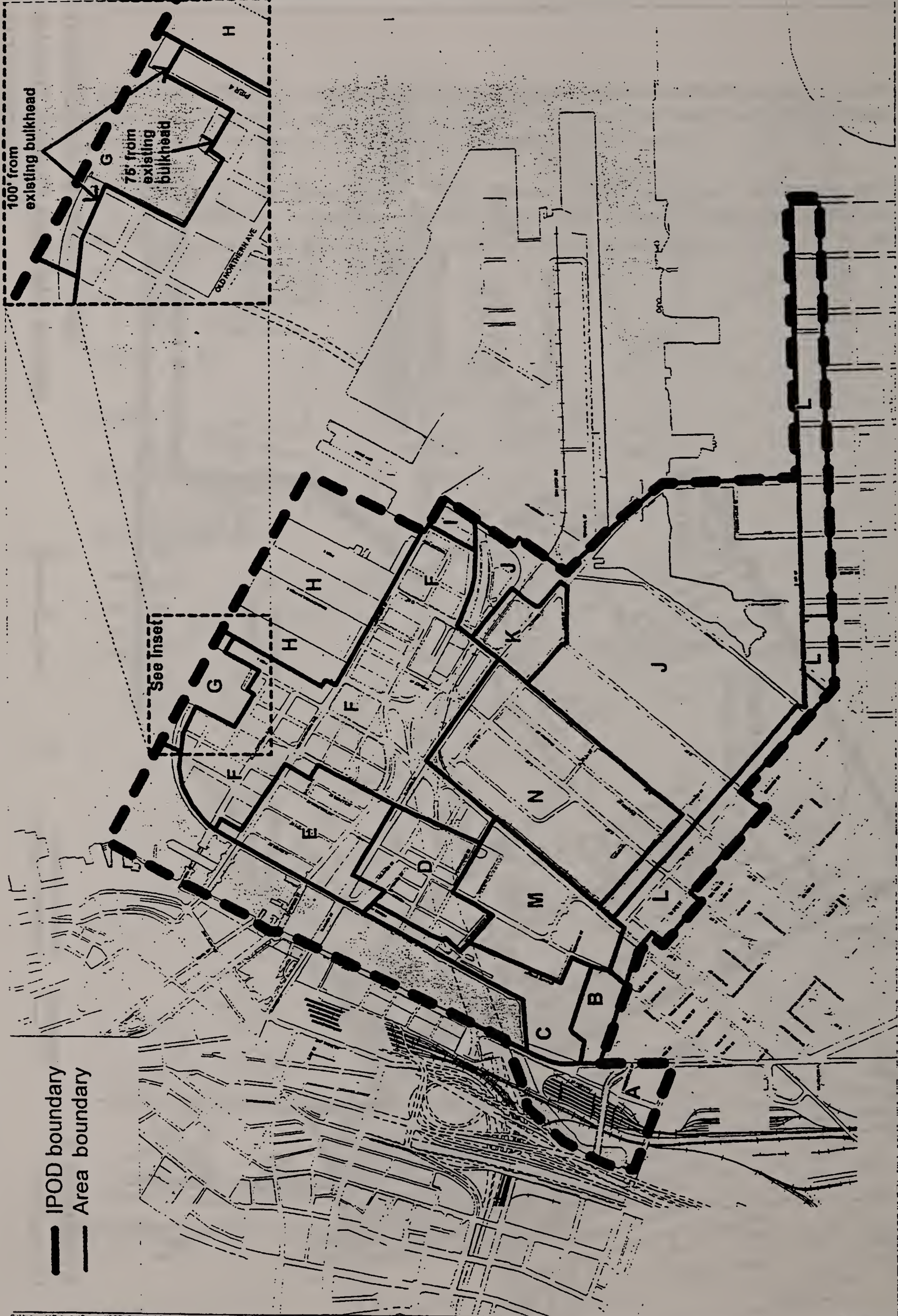
SECTION 27P-20. Sunset Provision; Subsequent Amendments. This Article shall be in effect for twelve (12) months. While in effect, this Article or portions of this Article may be repealed or superseded by subsequent amendments to this Article, or by amendments to the Underlying Zoning as to which notice of a public hearing before the Zoning Commission is published after the effective date of this Article.

SECTION 27P-21. Timetable for Rezoning. Submission of proposed zoning changes by the Boston Redevelopment Authority to the Zoning Commission shall be completed within eleven (11) months from the enactment of the South Boston Waterfront IPOD, and the Zoning Commission hearing on any petition to adopt proposed zoning changes shall be completed within twelve (12) months of the enactment of the South Boston Waterfront IPOD; provided that failure of the Boston Redevelopment Authority to submit proposed zoning changes to the Zoning Commission within eleven months, or failure of the Zoning Commission to conduct a hearing on such zoning within twelve months, shall not invalidate any provision of the South Boston Waterfront IPOD or Underlying Zoning.

SECTION 27P-22. Regulations. The Boston Redevelopment Authority may promulgate regulations to administer this Article; provided that such regulations shall become effective only upon adoption by the Zoning Commission.

SECTION 27P-23. Severability. The provisions of this Article are severable, and if any such provision or provisions shall be held invalid by any decision of any court of competent jurisdiction, such decision shall not impair or otherwise affect any other provision of this Article.

— IPOD boundary
— Area boundary



APPENDIX B HEIGHT AND FLOOR AREA RATIO (FAR)

to Article 27P

See Section 27P - 9.

**SOUTH BOSTON WATERFRONT
Interim Planning Overlay District (IPOD)**

APPENDIX B to ARTICLE 27P
(continued)

South Boston Waterfront
Interim Planning Overlay District

Interim Heights and Floor Area Ratios

<u>Area*</u>	<u>Building Height**/FAR**</u>
Area A	35'/2
Area B	125'/2
Area C	55'/2
Area D***	100'/5
Area E***	75'/5
Area F	150'/4
Area G	75'/2
Area H	55'/4
Area I	100'/3
Area J	65'/2
Area K	125'/2
Area L	35'/2
Area M	80'/4
Area N	****

(*) Boundaries of the height and FAR areas listed in this table are depicted on the accompanying map in this Appendix B.

(**) Subject to the requirements of Section 27P-11 (Interim Waterfront Yard Area Requirements).

APPENDIX B to ARTICLE 27P
(continued)

(***) In Areas D and E, in order to ensure that new development is compatible with the historic character of these areas, a Proposed Project to extend a building existing on the effective date of this Article may exceed the height and FAR specified in this Article, provided that the Board of Appeal grants permission for such height and FAR, pursuant to Article 6A. The Board of Appeal may grant such permission only if: (1) the height and FAR of the Proposed Project are in substantial accord with the height and FAR of the existing building; and (2) the Boston Redevelopment Authority finds, through Large Project Review, that the additional height and FAR will result in a design that is architecturally compatible with the existing building and the surrounding subdistrict, and that the Proposed Project is consistent with the planning goals of Sections 27P-1 and 27P-7. For the purpose of this provision only, "substantial accord" means, in the case of height, that the height of the Proposed Project shall not exceed the height of the existing building by more than one story, which story shall not exceed eighteen (18) feet in height.

(****) Area N comprises the Convention Center Special Study Area: See Section 27P-8.

APPENDIX C to ARTICLE 27P

South Boston Waterfront Interim Planning Overlay District
Enhancement Zone Subdistrict

Forbidden Uses

1. Cypher Street Study Area

Auditorium

Cinema

Concert hall

Theatre

Dormitory not accessory to a use

Fraternity

College or university

Adult Entertainment

Amusement game machines in commercial establishment

Amusement game machines in non-commercial establishment

Bar

Bar with live entertainment

Dance hall

Drive in theatre

Private club not serving alcohol

Private club serving alcohol

Restaurant with live entertainment not operating after 10:30 pm

Restaurant with live entertainment operating after 10:30 pm

Cemetery

Columbarium

Crematory

Hospital

Bed and breakfast

Conference center

Executive suites

Hotel

Motel

APPENDIX C to ARTICLE 27P (continued)

1. Cypher Street Study Area - (continued)

Cleaning plant

Restricted industrial use

Golf driving range

Stadium

Penal institution

Recycling facility (excluding facilities handling toxic waste)

Solid waste transfer station

Residential Uses

Drive-in restaurant

Adult bookstore

General retail business occupying a gross floor area of 75,000 square feet

Liquor store

Check cashing business

Container redemption center

Outdoor storage of solid fuel or minerals

Outdoor storage of damaged or disabled vehicles

Outdoor storage of junk and scrap

Storage of flammable liquids and gases - Large *

(*storage of thirty thousand (30,000) gallons or more of flammable liquids or ten thousand (10,000) cubic feet or more of gases)

Storage or transfer of toxic waste

Wrecking yard

Airport

Bus terminal

Garage with dispatch

Helicopter landing facility

Motor freight terminal

Rail freight terminal

Railroad passenger station

Water terminal

APPENDIX C to ARTICLE 27P (continued)

1. Cypher Street Study Area - (continued)

Airport-related remote parking facility

Bus servicing or storage

Parking garage

Parking lot

Rental agency for cars

Rental agency for trucks

Accessory bus servicing or storage

Accessory dormitory

Accessory drive-through retail

Accessory family day care home

Accessory home occupation

Accessory keeping of animals other than laboratory animals

Accessory professional office in a dwelling

Accessory services for apartment and hotel residents

2. D Street Study Area

Auditorium

Cinema

Concert hall

Theatre

Dormitory not accessory to a use

Fraternity

College or university

Adult Entertainment

Amusement game machines in commercial establishment

Amusement game machines in non-commercial establishment

Bar

Bar with live entertainment

Dance hall

Drive in theatre

Private club not serving alcohol

Private club serving alcohol

APPENDIX C to ARTICLE 27P (continued).

2. D Street Study Area - (continued)

Restaurant with live entertainment not operating after 10:30 pm

Restaurant with live entertainment operating after 10:30 pm

Cemetery

Columbarium

Crematory

Hospital

Bed and breakfast

Conference center

Executive suites

Hotel

Motel

Cleaning plant

Restricted industrial use

Golf driving range

Stadium

Penal institution

Recycling facility (excluding facilities handling toxic waste)

Solid waste transfer station

Mobile home

Mobile home park

One family detached dwelling

Temporary dwelling structure

Drive-in restaurant

Adult bookstore

Liquor store

Check cashing business

Container redemption center

Enclosed storage of solid fuel or minerals

APPENDIX C to ARTICLE 27P (continued)

2. D Street Study Area - (continued)

Outdoor storage of solid fuel or minerals

Outdoor storage of new materials if within 250 feet of a residential use

Outdoor storage of damaged or disabled vehicles

Outdoor storage of junk and scrap

Storage of flammable liquids - Large *

(*storage of thirty thousand (30,000) gallons or more of flammable liquids or ten thousand (10,000) cubic feet or more of gases)

Storage or transfer of toxic waste

Wrecking yard

Airport

Bus terminal

Garage with dispatch

Helicopter landing facility

Motor freight terminal

Rail freight terminal

Railroad passenger station

Water terminal

Airport-related remote parking facility

Bus servicing or storage

Outdoor sale of new or used vehicles

Parking garage

Parking lot

Rental agency for cars

Rental agency for trucks

Truck servicing or storage

Accessory bus servicing or storage

Accessory dormitory

Accessory drive-through restaurant

Accessory drive-through retail

Accessory family day care home

Accessory home occupation

Accessory keeping of animals other than laboratory animals

Accessory professional office in a dwelling

Accessory railroad storage yard

Accessory services for apartment and hotel residents

APPENDIX D to ARTICLE 27P

**South Boston Waterfront
Interim Planning Overlay District**

Water-Dependent Uses

Water-Dependent industrial uses.

Facilities for fishing, swimming, diving, and other water-based recreational activities.

Parks, esplanades, boardwalks, and other pedestrian facilities that promote public use and enjoyment of the water and are located at or near the water's edge.

Aquariums and other cultural, educational, research, or training facilities dedicated primarily to marine purposes or water-oriented exhibits.

Aquaculture facilities.

Navigation aids, marine police and fire stations, and other waterways public safety and law enforcement facilities.

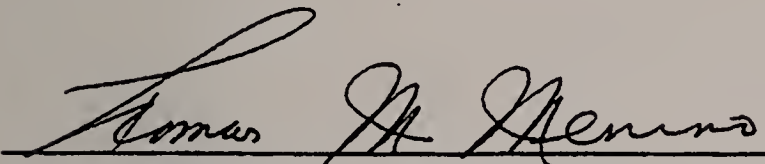
Shore protection structures, such as seawalls, bulkheads, revetments, dikes, breakwaters, rip rap, water deflectors, and the like.

Waterborne passenger transportation facilities, such as those serving ferries, cruise ships, commuter and excursion boats, and water shuttles and taxis.

Marinas, boat basins, Boat Rental Establishments, boating or sailing school, channels, storage areas, and other facilities and establishments for commercial or recreational boating.

Text Amendment Application No. 288

Text Amendment No. 259



Mayor, City of Boston

Date: 7/22/99

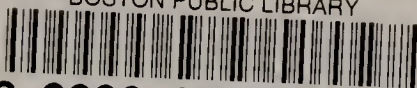
The foregoing amendment was presented to the Mayor on JULY 21, 1999, and was signed by him on JULY 22, 1999, whereupon it became effective on JULY 22, 1999, in accordance with Section 3 of Chapter 665 of the Acts of 1956, as amended.

Attest:



Secretary to the Zoning Commission

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